

PRELIMINARY GEOTECHNICAL ASSESSMENT:

50 Ryan Place, Beacon Hill

1.0	LANDSLIP RISK CLASS (<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 roof over the existing carport.
- 2.2** Extend the existing storeroom/stairs on the SE side of the house.
- 2.3** Add a new first floor addition to the existing house.
- 2.4** Construct a new deck on the downhill and part of the SE side of the house.
- 2.5** Various other internal and external alterations to the existing house.
- 2.6** Install a new rainwater tank on the downhill side of the house requiring minor levelling.
- 2.7** No significant fills are shown on the plans.
- 2.8** Details of the proposed development are shown on 6 drawings prepared by Meredith Clark Design, drawings numbered MCD:RP:DA03 to MCD:RP:DA08, Issue 1.

3.0 Site Location

3.1 The site was inspected on the 16th of December, 2020.

3.2 This residential property is accessed by a concrete right of carriage (ROW) and has a SW aspect. It is located on the moderate to steeply graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops at various locations across 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 filling for level garden/lawn areas across the property and a low cut for the house. The proposed development will require minor levelling for the proposed new rainwater tank.

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 property at an average angle of ~18° before reaching the top of a Hawkesbury Sandstone cliff face up to ~5.7m high. The slope is controlled by the exposed and underlying sandstone bedrock that steps down the site. Fill provides level garden areas across the property. The fills are supported by stable low brick retaining walls. A concrete driveway runs to a carport beside the house. The part two storey brick house is supported by brick walls and a concrete slab. The external supporting walls display no significant signs of movement. Medium Strength Hawkesbury Sandstone bedrock outcrops uphill, beside and downhill of the house. A gently sloping lawn extends off the downhill side of the house. The fill for the lawn is supported by a stable low sandstone block retaining wall constructed on rock near the edge of a sandstone cliff face up to ~5.7m high. The sandstone cliff face is considered to be stable. No signs of movement associated with slope instability were observed on the grounds that could have occurred since the property was developed.

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.

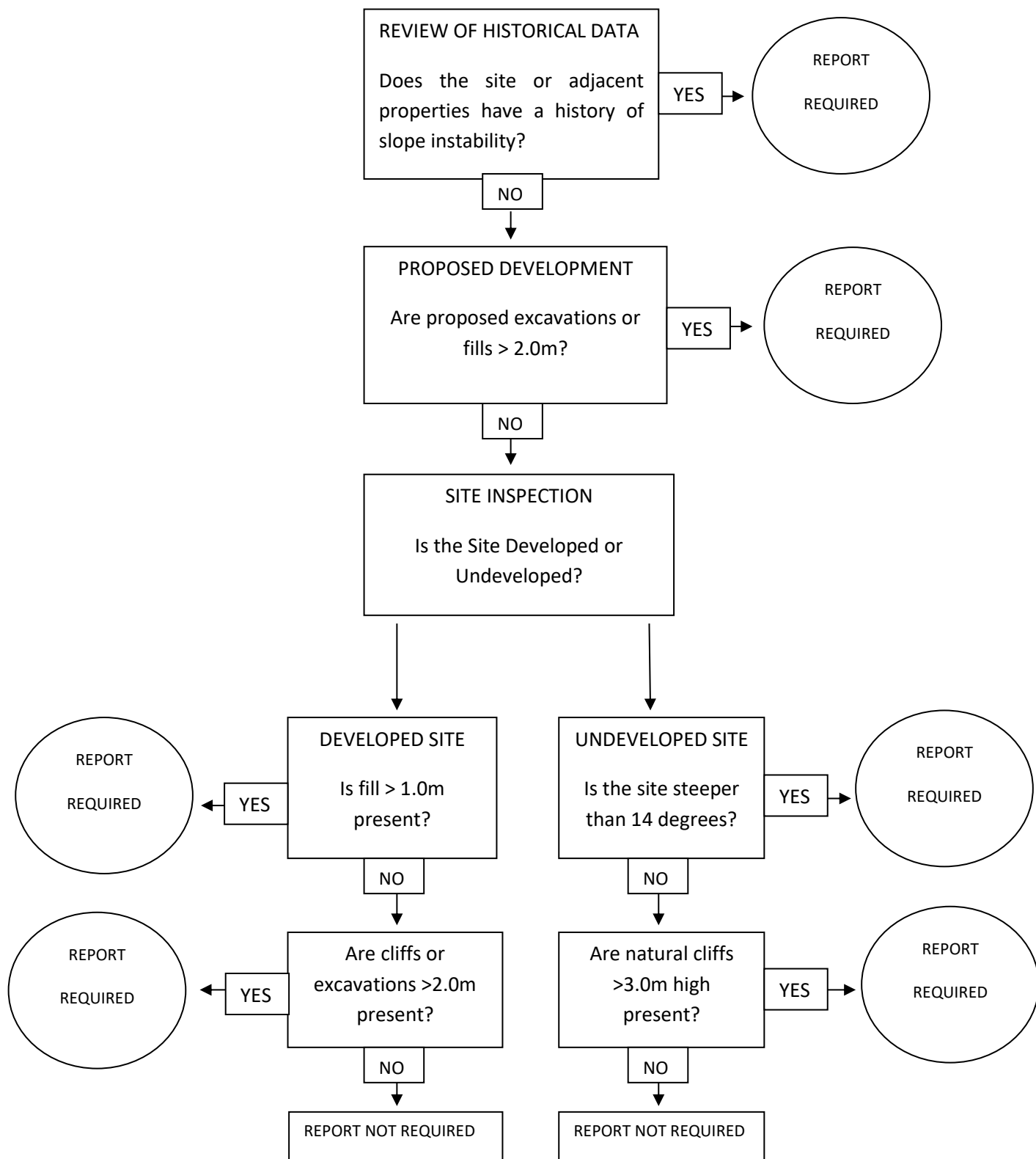
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



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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.
