PRELIMINARY GEOTECHNICAL ASSESSMENT:

26 Carnarvon Drive, Frenchs Forest

1.0	***LANDSLIP RISK CLASS*** *(Highlight indicates Landslip Risk Class of property)*
☐	*A - Geotechnical Report not normally required*
■	*B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required*
☐	*C - Geotechnical Report is required*
☐	*D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required*
☐	*E - Geotechnical Report required*

2.0 Proposed Development

2.1 Install a pool on the W side of the property by excavating to a maximum depth of ~1.9m.

2.2 Construct a paved patio area surrounding the pool area by excavating to a maximum depth of ~0.9m.

2.3 No fills are shown on the plans.

2.4 Details of the proposed development are shown on 2 drawing prepared by Rolling Stone Landscapes, project name 'Lockhart', drawings numbered 1 and 2, dated 1.10.22.

3.0 Site Location

3.1 The site was inspected on the 21st October, 2022.

3.2 This corner residential property is on the high side of Carnarvon Drive and Mrs Macquarie Drive. The property has a N aspect. It is located on the moderately graded middle 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 several fills to create garden beds and landscape the property. The proposed development will require an excavation to a maximum depth of ~1.9m.

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 surface rises from Carnarvon Drive at an average angle of ~9°. A ~1.2m high brick retaining wall supporting a fill for a garden and level lawn above lines the road frontage to Carnarvon Drive. The wall displays stepped cracking that runs the height of the wall. This is likely due to differential settlement of the foundations and not due to slope movement. At the road frontage to Mrs Macquarie Drive, a concrete driveway runs across the slope to a garage on the downhill side of the house. A fill for a level lawn area immediately above the driveway is supported by a ~1.0m high brick retaining wall. This wall also displays stepped cracking. As above, this is likely due to the differential settlement of the foundations. The two-storey brick house is supported on brick walls. The external brick walls show no significant signs of movement. A level lawn and patio area wrap around the uphill and W sides of the house to the upper and W common boundaries. The cut for the level patio area is supported by a stable ~1.1m high concrete block retaining wall. The area surrounding the house is almost entirely lawn-covered with some paved areas. No significant 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. No geotechnical hazards that could impact on the subject property were observed on the surrounding neighbouring properties as viewed from the subject property and the street.

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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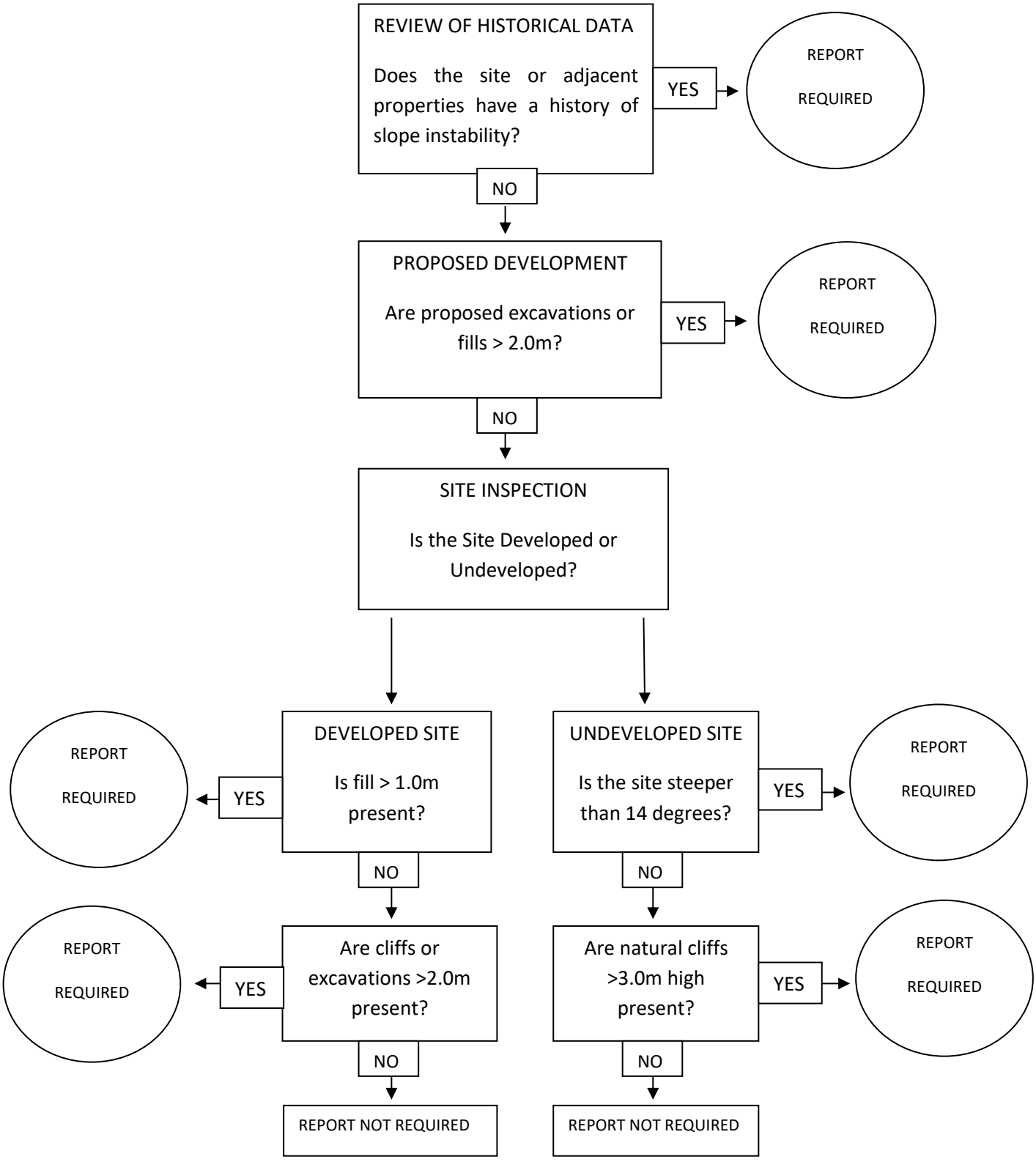
Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)



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.
