PRELIMINARY GEOTECHNICAL ASSESSMENT:

416 Cooyong Road, Terrey Hills

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 new pool and spa at the location of the existing pool by excavating to a maximum depth of ~2.0m.

2.2 Construct a gym and outdoor kitchen NE of the house, requiring excavations to a maximum depth of ~0.7m and fill to a maximum height of ~1.5m.

2.3 Construct a pavilion on the W side of the existing tennis court.

2.4 Various other minor external alterations and additions.

2.5 Details of the proposed development are shown on 5 drawings prepared by Rolling Stone Landscapes, job Sherlock, drawings numbered D.A.3-1. to D.A.3-5. All dated 13th March 2024.

3.0 Site Location

3.1 The site was inspected on the 7th December, 2023.

3.2 This large rural/residential property is level with the road and has a NW aspect. It is located on the gently graded lower reaches of a hillslope. Medium Strength Sandstone is exposed along the S side of the W common boundary. 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 by an excavation for a pool, and low cuts and fills for paved, lawn and garden areas across the property. The proposed development will require a maximum ~2.0m excavation for the pool, and a maximum ~0.7m excavation and ~1.5m of fill for a level platform for the gym and outdoor kitchen.

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 ~5°. At the road frontage, a gravel driveway runs beside the upper common boundary to a garage attached to the SE side of the house. Between the road frontage and the house is a gently sloping lawn area. In this location is a single-storey secondary dwelling of fibre board construction, stepped cracking was observed in the NW brick foundation (Photo 1). As this building significantly predates the main house, the cracking is considered normal and we attribute it to minor settlement. A pool that shows no significant signs of movement has been excavated into the slope between the secondary dwelling and the house. The single-story rendered masonry house is supported on rendered masonry walls. No significant signs of movement were observed in the supporting walls. The land surface S of the house is gently sloping lawn and natural bushland. Fill for the house is supported on the downhill side by a stable dry stack stone block wall reaching up to ~1.0m. Below the house, fill has been laid for a level platform for a tennis court. The downhill side of this fill is lawn covered and battered at stable angles. Fill has also been laid south of the tennis court, for golfing greens, the fill here is similarly lawn covered and battered at

stable angles. Below the property, the Neverfail Gulley watercourse runs roughly parallel to the downhill common boundary, and cuts through the subject property in the NW corner. 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, apart from the required foundation inspection below, is recommended for the proposed development.

6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.

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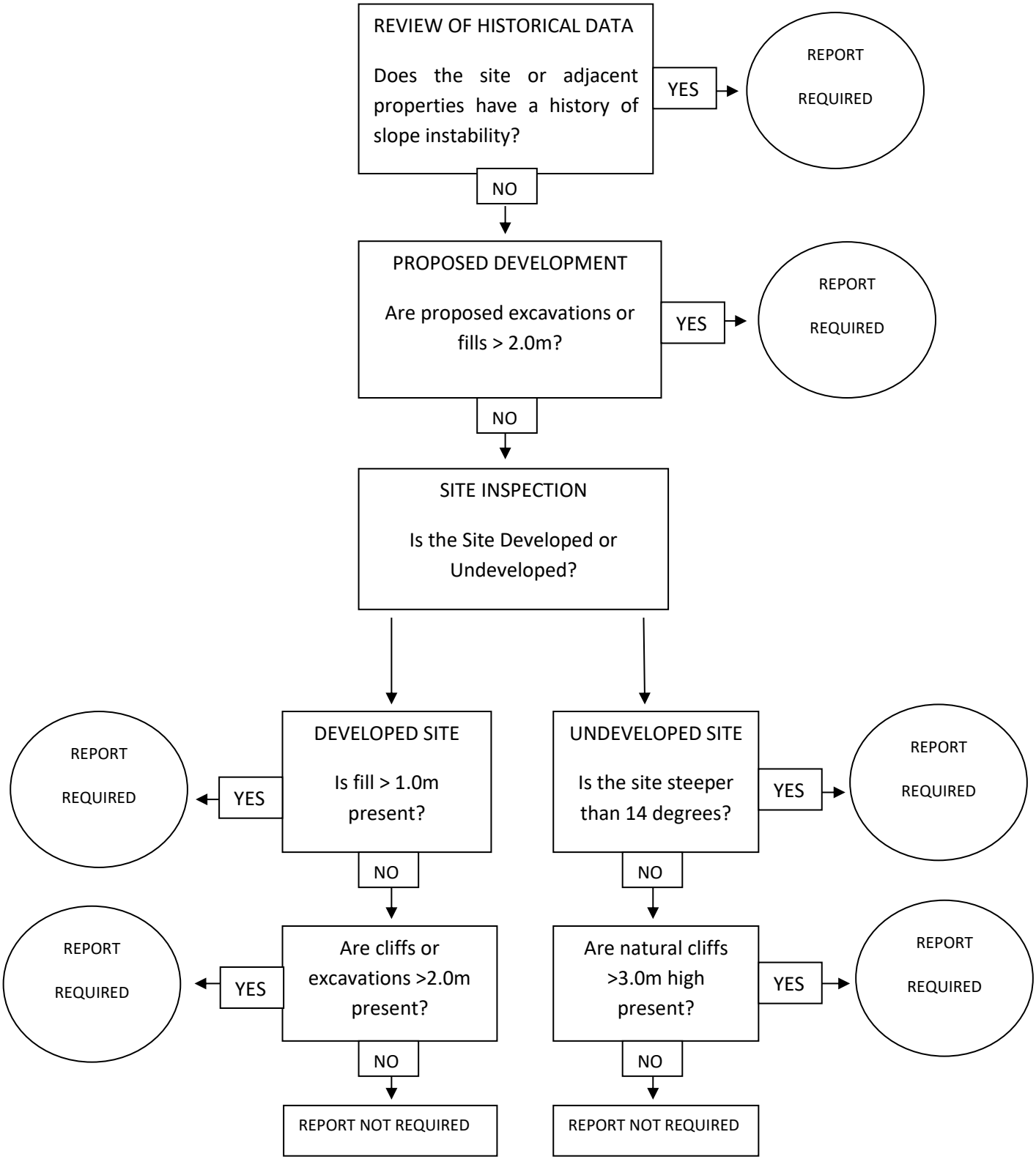
Photo 1

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.
