PRELIMINARY GEOTECHNICAL ASSESSMENT:
13 Athol Street, 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 Demolish the existing pool exposing a cut batter up to ~1.8m high.

2.2 Install a new pool at the location of the old pool requiring minor levelling.

2.3 No significant fills are shown on the plans.

2.4 Details of the proposed development are shown on 4 drawings prepared by Crystal Pools, job number 14718, drawings numbered P01 to P04, Revision C, dated 25/3/22.

3.0 Site Location

3.1 The site was inspected on the 1st November, 2022.

3.2 This residential property is on the low side of the road and has a SE aspect. The block runs longways to the E so the slope is a cross-fall. It is located on the gentle to moderately 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, although a Shale band (Rhs) in the surrounding Hawkesbury Sandstone is

shown close to the N side of the property and at a residential scale the map is not always accurate.

The natural surface of the block has been altered with cuts for the house and pool and fills for the carport and lawn/garden areas across the property. The proposed new pool will require minor levelling.

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 land surface falls across the property at an average angle of ~9°. At the road frontage, a concrete driveway runs to a stable rendered masonry carport on the SW side of the house. Fill has been placed under the carport as formwork. The fill is lined by stack rocks. The two storey rendered brick house is supported by brick walls and brick piers. The supporting walls and piers stand vertical and show no significant signs of movement. Stable rendered masonry and concrete block retaining walls up to ~1.8m high support the cut for the house. Low rendered masonry, stack rock and timber retaining walls near the N common boundary support fill on the N neighbouring property and a cut on the subject property. The timber retaining wall is tilting downslope significantly, but due to its low height and location it is not considered a significant threat to life or property.

A pool is located near the SE corner of the property. The pool will be replaced as part of the proposed works. A timber retaining wall up to ~1.8m high supports a cut and fill beside the pool. The wall displays some minor bulging (Photo 1). See '**Section 5.0** Recommendations'. The area surrounding the house is mostly lawn or garden covered with some paved areas. Apart from the tilting and bulging timber retaining walls, 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.

The bulging timber retaining wall (Photo 1) is to be monitored by the owners on an annual basis or after heavy and prolonged rainfall, whichever occurs first. A photographic record of these inspections is to be kept. Should further movement occur the wall is to be remediated so it meets current engineering standards. We can carry out these inspections upon request.

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

White Geotechnical Group Pty Ltd.

Dion Sheldon
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Reviewed By:

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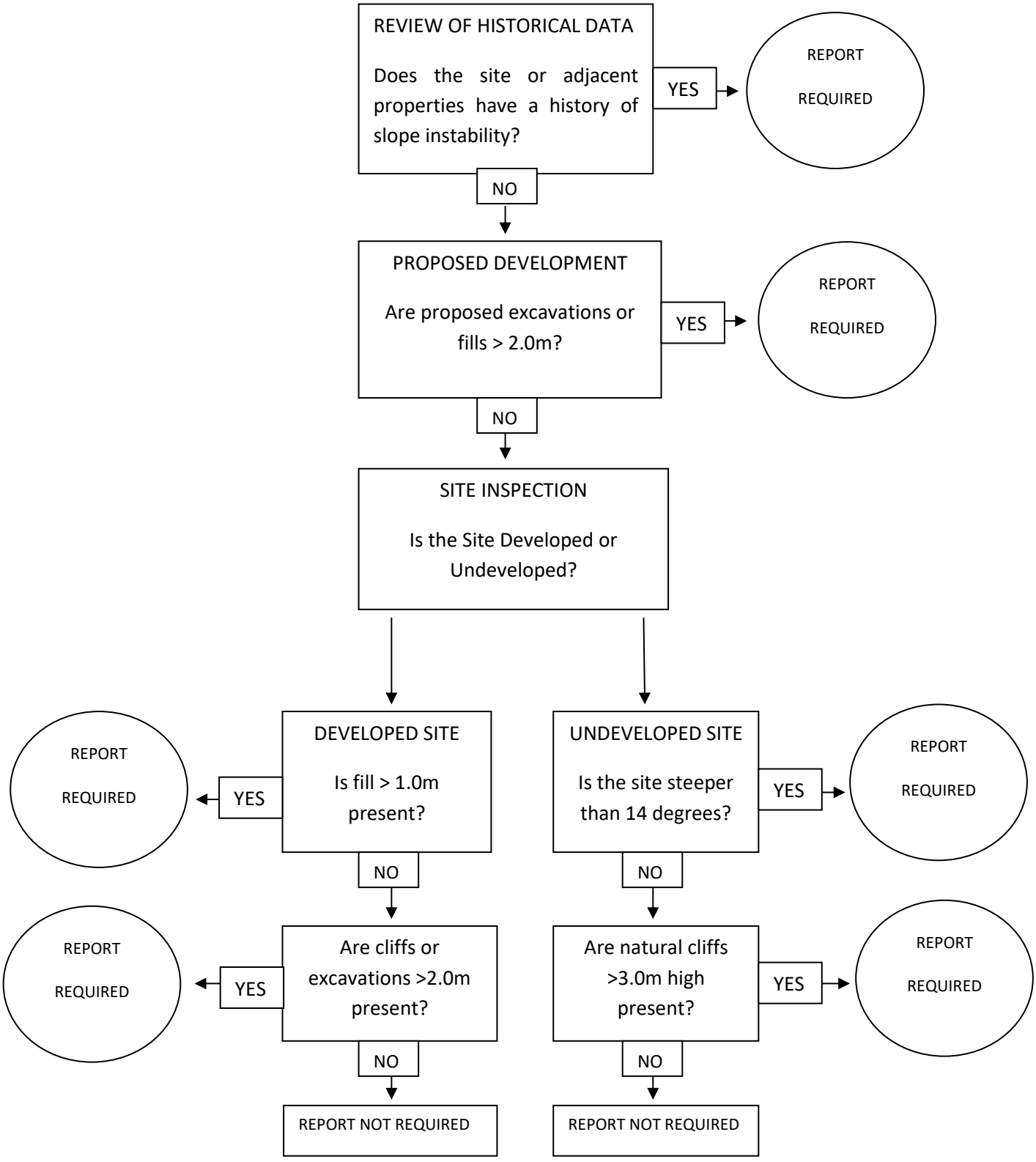
Photo 1

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.
