PRELIMINARY GEOTECHNICAL ASSESSMENT:

24 Milham Crescent, Forestville

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 on the downhill side of the house and construct an extension to the downhill side of the house in this location.

2.2 Install a new pool on the downhill side of the property by excavating to a maximum depth of ~1.7m.

2.3 Various other minor internal and external alterations.

2.4 No significant fills are shown on the plans.

2.5 Details of the proposed development are shown on 9 drawings prepared by JAH Design Services, Project number 2013, drawings numbered DA01 to DA09, dated 8/7/21.

3.0 Site Location

3.1 The site was inspected on the 2nd March, 2021.

3.2 This residential property is on the downhill side of the road and has a N aspect. It is located on the gentle to moderately graded upper middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops and steps down 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 used for landscaping and an excavation for a pool on the downhill side of the property. The proposed development will require an excavation to a maximum depth of ~1.2m for the new pool.

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 site at an average angle of ~9°. At the road frontage, a concrete driveway runs to a garage attached to the W side of the house. An excavation has been made in the slope between the road frontage and the house for a level lawn area. The cut is supported by a concrete block retaining wall reaching ~1.7m high. The retaining wall displays some minor cracking. This is most likely because the concrete block components of the wall were never core-filled. The structural integrity of the wall will be enhanced if the wall is core-filled but we note this wall does not meet current engineering standards. The part two-storey rendered brick house is supported on brick walls. No significant signs of movement were observed in the supporting walls of the house. Some of the supporting walls were observed to be supported directly onto outcropping Medium Strength Sandstone on the E side of the house. An excavation has been made in the slope on the downhill side of the house for a pool that will be demolished as part of the proposed works. Filling has been placed beside the pool for a lawn area that extends off the downhill side of the house. The fill is partially supported by a stable brick retaining wall and partially by a stable concrete cylinder gravity wall both reaching ~1.0m high. A gentle to moderate garden slope falls from the base

of the walls to the lower common boundary. Medium Strength Sandstone outcrops through this slope. The area surrounding the house, driveway, and pool 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.

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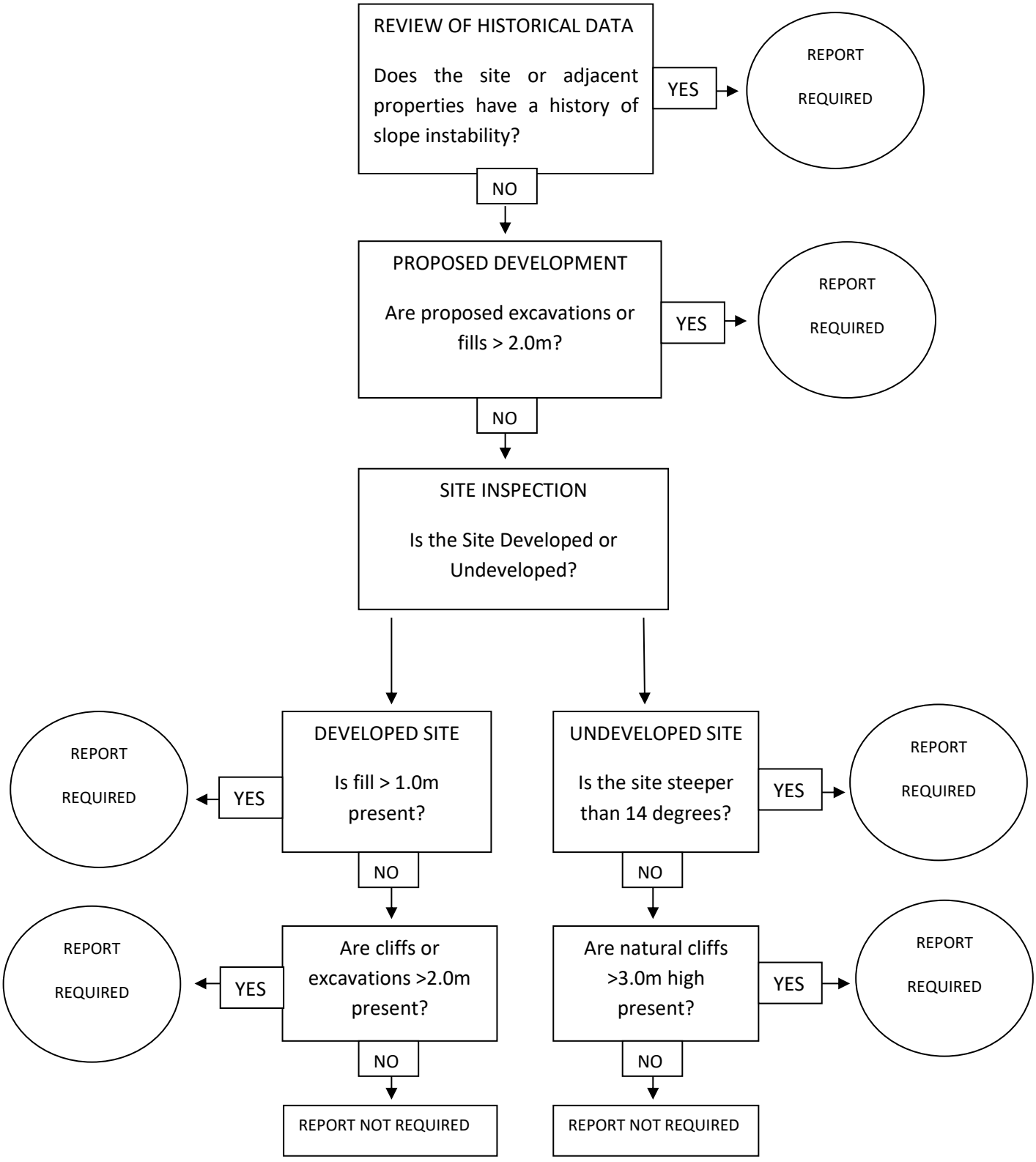
Preliminary Assessment Flow Chart – Norther Beaches Council (Warringah)



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.
