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### PRELIMINARY GEOTECHNICAL ASSESSMENT:

### **8 Townsend Avenue, 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** Construct a new deck on the downhill side of house.
- 2.2 Re-landscape the downhill side of the property by filling to a maximum height of ~1.0m.
- **2.3** Various other minor internal and external alterations.
- **2.4** Apart from those for footings, no excavations are required.
- 2.5 Details of the proposed development are shown on 6 drawings prepared by JAH Design Services, Project number 2122, drawing numbered DA01 is dated January 2022, and drawings numbered DA02 to DA06 are dated March 2022.

#### 3.0 Site Location

- **3.1** The site was inspected on the 7<sup>th</sup> February, 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 S so the slope is a cross-fall. It is located on the gentle to



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moderately graded upper 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 an excavation for the pool, and with a fill to create a level platform for the house. The proposed development will require filling to a maximum height of ~1.0m to re-landscape the downhill side of the property.

**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

At the road frontage, a concrete driveway runs to a garage attached to the E side of the house. Between the road frontage and the house is a gently sloping lawn. The single-storey brick house is supported on brick walls. The external supporting walls of the house display no significant signs of movement. An excavation has been made in the slope to create a level platform for the uphill side of the house. The cut is supported by a stable brick retaining wall reaching ~0.6m high. A pool has been cut into the slope on the downhill side of the house. The water level of the pool indicates no foundation movement has occurred in the shell of the pool since its construction. Filling has been placed around the pool to create a level platform for the house and pool area. The fill is supported by a concrete block retaining wall reaching ~1.7m high. This wall had a dense covering of vegetation but, from what could be seen, appears stable. The area surrounding the house 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 immediate vicinity. The adjoining neighbouring properties were observed to be in good order as seen from the road and the subject property.



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### 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.

Ben White M.Sc. Geol.,

Bullet

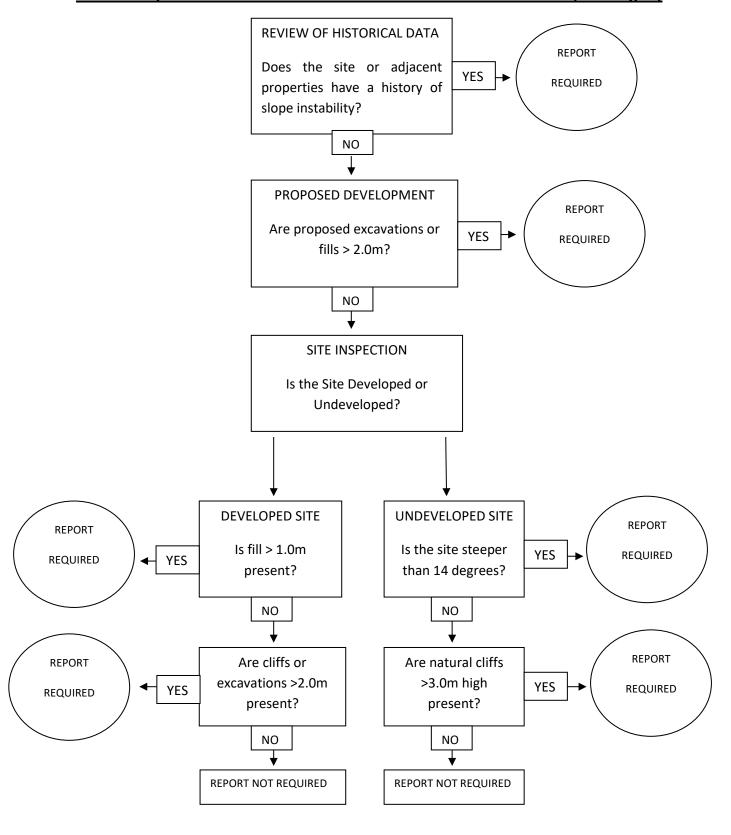
AusIMM., CP GEOL. No. 222757

Engineering Geologist.



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# **Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)**





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#### 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.