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PRELIMINARY GEOTECHNICAL ASSESSMENT:

2 Worrobil Street, North Balgowlah

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** Extend the existing concrete car space on the SW corner of the property.
- **2.2** Construct a new two storey balcony on the S side of the existing unit building.
- **2.3** No significant excavations or fills are shown on the plans.
- 2.4 Details of the proposed development are shown on 13 drawings prepared by JJ Drafting, Job Number 797/20 drawings numbered DA.01 to DA.13, dated May 2020.

3.0 Site Location

- **3.1** The site was inspected on the 13th May, 2020.
- 3.2 This residential property is on the high side of the road and has a S aspect. It is located on the gentle to steeply graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the uphill and downhill sides of 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



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cuts and fills to provide level platforms for the garage, unit buildings and landscaped areas.

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 rises from the road frontage to the uphill side of the existing garage at an angle of ~5°. Outcropping Medium Strength Sandstone steps up from the uphill side of the garage. The natural slope rises from above the outcropping sandstone to the uphill boundary of the property at an average angle of ~10°.

At the road frontage, a concrete driveway leads to the existing garage. The W portion of the garage displays minor stepped cracking through one of its supporting concrete walls. Sandstone bedrock outcropping W of the garage has some closely spaced bedding planes but is considered competent rock. Above the rock are sandstone stack rock retaining walls. A cut has been made through the outcropping sandstone bedrock behind the garage. The cut face is unsupported and shows no signs of movement, noting the garage is estimated to have been in place for at least 50 years. Massively bedded sandstone bedrock is outcropping uphill of the E portion of the garage. The outcropping rock face naturally slopes upslope at an angle of ~27°. Concrete steps lead to the existing part three storey unit building. The rendered masonry unit building is supported by brick walls, brick piers and concrete block walls. The supporting walls and piers stand vertical and show no significant signs of movement. A concrete block retaining wall ~1.6m high supports a cut and fill near the W common boundary. Uphill of the retaining wall is another concrete block retaining wall ~2.0m high which supports fill. Both of the retaining walls are in good condition.

A small single storey rendered masonry dwelling that appears to be in good condition is located to the E of the part three storey unit building. A two storey rendered masonry building



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is located on the uphill side of the property. The building is supported by rendered masonry walls, brick walls and concrete block walls. The external supporting walls show no significant signs of movement. A small single storey rendered masonry and concrete block building is located near the NW corner of the property.

The area surrounding the house is mostly paved or lawn covered. No signs of movement associated with slope instability were observed on the grounds. 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.

White Geotechnical Group Pty Ltd.

Feeling

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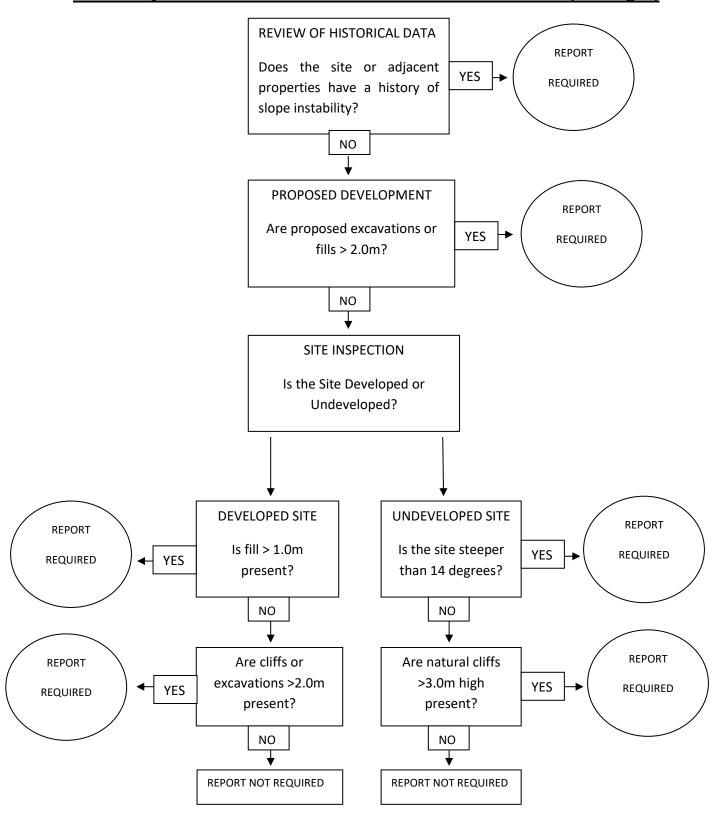
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Engineering Geologist



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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.