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PRELIMINARY GEOTECHNICAL ASSESSMENT:

142 Sydney Road, Fairlight

1.0 Proposed Development

- 1.1 Extend the downhill side of the building and construct a new lower ground floor addition by excavating to a maximum depth of ~0.7m.
- 1.2 Construct a new parking area between the existing garage and the building by excavating to a maximum depth of ~1.7m.
- **1.3** Construct a new first floor addition for an apartment.
- **1.4** Various other internal and external alterations.
- **1.5** No fills are shown on the plans.
- Details of the proposed development are shown on 19 drawings prepared by Watershed Design, Job number 13010, drawings numbered DA00 to 18, Issue J, dated 13/5/19.

2.0 Site Location

- **2.1** The site was inspected on the 12th September, 2019.
- 2.2 This mixed-use property is on the low side of the Sydney Road and has a N aspect. It is also accessed by a Right of Carriageway (ROW) off Thornton Street. The block is located on the gently graded upper reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops within the storage room under the downhill of the building. 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 excavations for a storage room under the downhill side of the building and for a garage on the downhill side of the property. The proposed development will require



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excavations to a maximum depth of $^{\sim}0.7 \mathrm{m}$ for the proposed lower ground floor

extension and ~1.7m for the proposed parking area.

2.3 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.

3.0 Site Description

The natural slope falls across the site at an average angle of ~6°. The single-storey brick

building extends from the road frontage to Sydney Road. It is supported on brick walls. No

significant signs of movement were observed in the supporting brick walls. Some of the

supporting walls were observed to be supported directly off competent Medium Strength

Sandstone. A ~1.4m cut has been made under the downhill side of the building for a storage

area. The cut has been taken entirely through Medium Strength Sandstone. No significant

geological defects were observed in the cut face and it is considered stable. Between the

building and the garage is a clad studio that will be demolished as part of the proposed works.

A brick garage extends from the studio to the lower boundary. No significant signs of

movement were observed in the supporting brick walls of the garage. The garage is accessed

by a ROW off Thornton Street. The area surrounding the building is mostly paved. 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.

4.0 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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White Geotechnical Group Pty Ltd.

Ben White M.Sc. Geol., AusIMM., CP GEOL.

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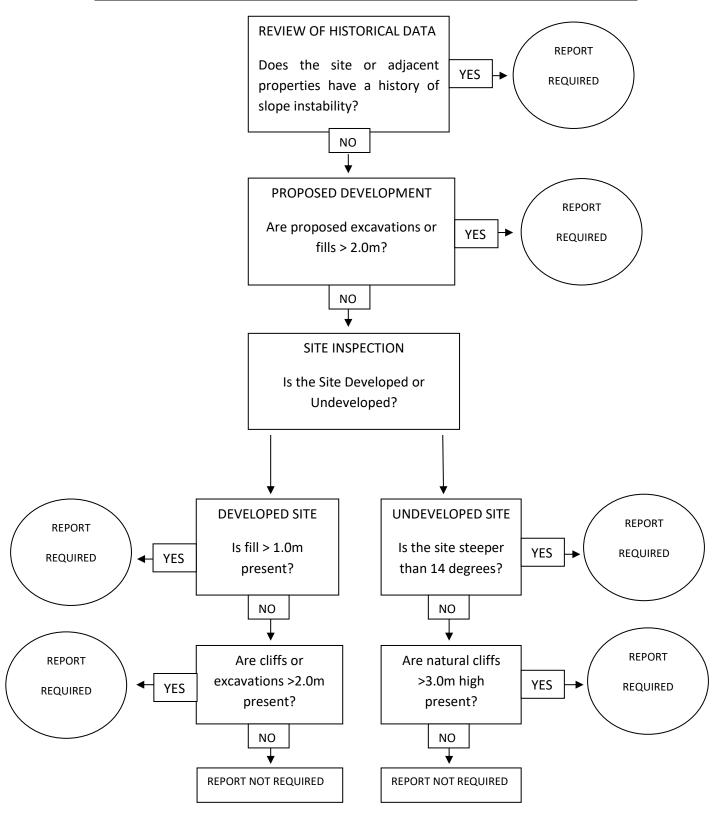
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Engineering Geologist.



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<u>Preliminary Assessment Flow Chart – Norther Beaches Council (Manly)</u>





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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.