Sent: 23/09/2019 4:26:27 PM

Subject: Preliminary geotech report - 114 Delmar Parade, Dee Why **Attachments:** Preliminary Geotech 114 Delmar Parade Dee Why.pdf;

Hi Kevin,

As requested, please find the attached preliminary Geotech report for the above property.

Kind Regards,

Ben Farrar Director Serenescapes Landscape Designs Pty Ltd

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PRELIMINARY GEOTECHNICAL ASSESSMENT FOR PROPOSED SWIMMING POOL AT 114 DELMAR PARADE, DEE WHY

1.0 INTRODUCTION.

- **1.1** This assessment has been prepared to accompany an application for Clause 4.55 to an existing development approval No. DA2013/1229.
- 1.2 The site is located in land that is subject to Area B on the Landslip Risk Map. The methods used in this Assessment are based on those described in Landslide Risk Management March 2007, published by the Australian Geomechanics Society. Also Council checklist contained within Clause E10 of Warringah DCP and the WLEP Map identifying the Landslip Risk Class as highlighted (red) below:-

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 Council officers to decide if Geotechnical Report is required
E Geotechnical Report required

1.3 The experience of Hodgson Consulting Engineers spans some 25 years in Northern Beaches and the Greater Sydney area.

2.0 PROPOSED DEVELOPMENT

- **2.1** Construct a new swimming pool in the rear of the subject property.
- **2.2** Details of the proposed development are shown on a series of architectural drawings prepared by Serenscapes Landscape Designs, Project No: 19559, Dwg No: L-01 to 03 Revision A and dated 22nd July, 2019.



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3.0 <u>SITE LOCATION</u>

- **3.1** The site was inspected for this assessment on the 19th September, 2019.
- **3.2** The property is on the high side of the road and has a north-easterly aspect. The land slopes away from the block to the north and east located on a moderate slope of approximately 5 degrees controlled by the underlying bedrock that outcrops to the south of the house.

4.0 SITE DESCRIPTION

The average sized residential block is situated on a corner with road frontages to Delmar Parade and Carew Street. A short driveway leads to a single stand-alone garage situated in the south-east corner of the block. Pedestrian access is via a path that enters from the middle of the eastern boundary of the block. The cut batter for Carew Street merges into the natural slope and is grass covered. The cut for Delmar parade is through Hawkesbury Sandstone bedrock. Rendered brick walls align the fence line along the northern and eastern boundaries of the block. A level lawn with perimeter planted garden beds, extends from the new house to the northern boundary. The surface features of the rear yard are controlled by the underlying and exposed Hawkesbury Sandstone bedrock. A concrete patio area extends off the south side of the residence rising to two upper level lawn terraces. The lower terrace is supported by a low, well-constructed retaining wall. The upper-most terrace accessed by concrete steps is supported by stable sandstone block retaining walls founded on exposed bedrock. At the time of our inspection no significant geotechnical hazards were identified and the existing residence was in good condition with no signs of significant movement.

5.0 **RECOMMENDATIONS**

The proposed swimming pool will require minimal excavation for any new footings that are required. The depth to the underlying bedrock is approximately 0.5 to 1.5 metres. We recommend that any new foundations required are to be taken to the underlying bedrock.



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The proposed alterations, additions and existing site conditions were considered and applied to the Council Flow Chart for class B area as contained within Clause E10 of Warringah DCP and the WLEP.

Based on this preliminary assessment, the proposed development works would be considered satisfactory from a Geotechnical and landslip perspective subject to the application of good engineering practice for the structural design and construction methods. It is not proposed to undertake major excavation for the works; therefore it is recommended no further geotechnical assessment is required.

HODGSON CONSULTING ENGINEERS PTY LTD

Garth Hodgson MIE Aust Member No. 2211514

Civil/Geotechnical & Structural

Engineer