PRELIMINARY GEOTECHNICAL ASSESSMENT
FOR
PROPOSED ALTERATIONS AND ADDITIONS
AT
22 CONNEMARRA AVENUE, KILLARNEY HEIGHTS

1.0 INTRODUCTION.

1.1 This assessment has been prepared to accompany an application for development approval.

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 new first floor addition over the existing residence.

2.2 Details of the proposed development are shown on a series of architectural drawings prepared by Your Style Designer Home Additions, SEM 1019 07, Dwg No: 1, 3, 6 to 8 and dated 19th November, 2019.

DIRECTOR: G. HODGSON
PO Box 389 Mona Vale NSW 1660
Telephone: 0410 664 359
ABN 92 164 537 973

3.0 SITE LOCATION

3.1 The site was inspected for this assessment on the 25th November, 2019.

3.2 This average sized residential block has an easterly aspect. From the road frontage the site falls gently to east towards approximately 0 to 5 degrees the rear boundary and a cross fall moderately steep to the south at approximately 15 to 20 degrees.

4.0 SITE DESCRIPTION

From the road frontage a concrete driveway crossing starts at the north western corner of the property heading east towards the detached garage. Pedestrian access to the main entrance is via a pathway adjacent the southern side of the driveway. An in ground swimming pool is on the southern side of the main entrance pathway. Area around swimming pool towards the front boundary has been terraced with small timber retaining walls. Access to the rear of the property is via a pathway on the northern side of the existing residence. At the rear of the existing residence is gently sloping lawn and paved area. Along the southern side boundary there is a sandstone flagging retaining wall. The existing residence is of brick veneer construction supported on strip and pad footings. 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 due to geotechnical instability.

5.0 RECOMMENDATIONS

The proposed alterations and additions may require minimal excavation for any new footings that are required. The depth to the underlying bedrock is approximately 0.5 to 1.0 metres. We recommend that any new foundations required are to be taken to the underlying bedrock.

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. As it is not proposed to undertake any major excavation for the future works it is therefore recommended that no further geotechnical assessment is required.

HODGSON CONSULTING ENGINEERS PTY LTD

Garth Hodgson MIE Aust
Member No. 2211514
Civil/Geotechnical & Structural
Engineer