PRELIMINARY GEOTECHNICAL ASSESSMENT
FOR
PROPOSED ALTERATIONS AND ADDITIONS
AT
39 HEATHER STREET WHEELER HEIGHTS

1.0 INTRODUCTION.

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

1.2 The site is located in land that is subject to Area D 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 ground and first floor alterations and additions in various locations around the existing residence.

2.2 Details of the proposed development are shown on a series of architectural drawings prepared by JJ Drafting Job No: 757/19 Dwg No: DA.01 to DA.14, Revision A and dated 24th February, 2020.

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3.0 SITE LOCATION

3.1 The site was inspected for this assessment on the 1st May, 2020.

3.2 This property is an average sized rectangular residential block and has a south-westerly aspect. From the road frontage the site falls steeply towards the south west at approximate average angles of some 10 to 20 degrees.

4.0 SITE DESCRIPTION

From the road frontage a concrete vehicle crossing provides access to a paved driveway that extends along the southern boundary of the block. This driveway provides access to the carport and garage that is under the south western corner of the existing residence. The north eastern portion of the front yard is comprised of two terraced lawn areas. Two low and stable brick retaining walls support the terraces. Access to the main entry of the existing residence is via the driveway and carport. Concrete pathways on the western side of the garage and the eastern side of the existing residence provide access to the rear yard. The rear yard is of a gentle to moderate slope with paved a pathway at the rear of the residence and a lawn area before the swimming pool. Another lawn area is to the south of the swimming pool. A small timber retaining wall supports this lawn area adjacent the rear boundary. This retaining wall appeared to be stable at the time of our inspection. 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 1.5 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 D 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.

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