

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1 – To be submitted with Development Application

Development Application for Carlia & Adam Gaffney
Name of Applicant

Address of site 34 Wallumatta Road, Newport

Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report

I, Garth Hodgson on behalf of Hodgson Consulting Engineers Pty Ltd
(insert name) (Trading or Company Name)

on this the 5th July, 2021 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least \$2million.

Please mark appropriate box

- ☐ Prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009
- ☐ I am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009
- ☐ Have examined the site and the proposed development in detail and have carried out a risk assessment in accordance with paragraph 6.0 of the Geotechnical Risk Management Policy for Pittwater - 2009. I confirm the results of the risk assessment for the proposed development are in compliance with the Geotechnical Risk Management Policy for Pittwater - 2009 and further detailed geotechnical reporting is not required for the subject site.
- ☒ Have examined the site and the proposed development/alteration in detail and am of the opinion that the Development Application only involves Minor Development/Alterations that do not require a Detailed Geotechnical Risk Assessment and hence my report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements for Minor Development/Alterations.
- ☐ Have examined the site and the proposed development/alteration is separate form and not affected by a Geotechnical Hazard and does not require a Geotechnical report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements
- ☐ Provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report

Geotechnical Report Details:

Report Title: 34 WALLUMATTA ROAD, NEWPORT. Geotechnical letter for proposed alterations and additions– QP 00277A

Report Date: 4th July, 2021

Author : Garth Hodgson

Author's Company/Organisation : HODGSON CONSULTING ENGINEERS PTY LTD

Documentation which relate to or are relied upon in report preparation:

JJ Drafting, Job No: 899/21, Dwg No: DA.01 to DA.15, Revision D and dated 1st June, 2021

I am aware that the above Geotechnical Report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the Geotechnical Risk Management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature

Name Garth Hodgson

Chartered Professional Status MIE Aust

Membership No. 2211514

Company Hodgson Consulting Engineers Pty Ltd

The General Manager
Northern Beaches Council
Pittwater Area
PO Box 82
MANLY NSW 2095

Dear Sir,

34 WALLUMATTA ROAD, NEWPORT.
Geotechnical letter for proposed alterations and additions

A Geotechnical Site Inspection was carried out at the subject address on the 28th October, 2020. No subsurface investigation was undertaken. The site is mapped by the Northern Beaches Council 'Pittwater LEP 2014' Geotechnical Hazard Map with the entire site in Hazard Category H1, Figure 1.

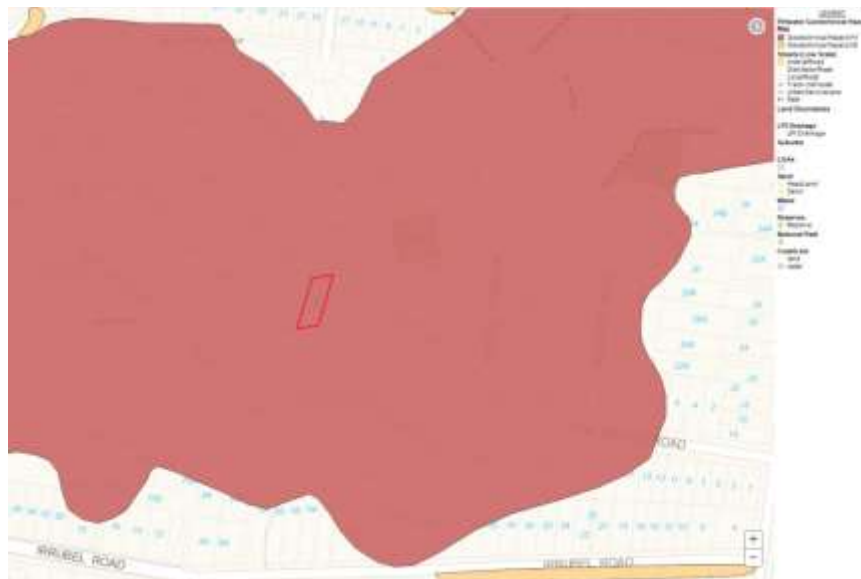


Figure 1

The proposed works will comprise of the construction of new lower ground floor level front deck extension and various internal changes on the lower and ground floor level. A new roof is also proposed over the existing ground floor level front deck. Minimal excavation is required for new foundations of the lower floor level external staircase. Details of the proposed alteration and additions are shown on the plans prepared by JJ Drafting, Job No: 899/21, Dwg No: DA.01 to DA.15, Revision D and dated 1st June, 2021.

The site is on the high northern side of Wallumatta Road and has a southerly aspect. The subject property is located in the top third of the main slope. The main slope is steep to very steep slope and rises predominately to the north at average angles of 20 to 30 degrees from Irrubel Road to the crest of the slope near the intersection of Raymond Road and Argyle Street above the subject property.

Vehicular and pedestrian access is via a shared driveway near the south western corner of the subject property. The road cut is on the lower southern side of the driveway with the driveway and the retaining wall in Council's road reserve. A large sandstone boulder retainage wall is visible from street level supporting the road cut and the driveway above the retaining wall. An existing carport is adjacent the front boundary in front of the existing two storey residence. A rock stacked retaining wall supports the cut on the northern side of the carport. A landscaped set of stairs at the eastern end of the carport provides access to the lower ground floor level entry. The front yard is partially terraced by small landscaping retaining walls made from stone and timber. A timber retaining wall near the south western corner of the existing residence will need to be replaced as soon as possible as it has partially failed. The existing part two storey existing residence is approximately in the middle of the property. Access to the rear of the property is via a pathway on the eastern side of the existing residence. Adjacent the north eastern corner of the property is another timber retaining wall in need of repair in the near future. The rear yard is steeply sloped with exposed sandstone bedrock and displaced joint blocks embedded in the slope. Small timber and rock retaining walls have been used to create terraces and garden beds on the slope.

The existing residence is of a mixture of timber and 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 fair to good condition with no signs of significant movement due to geotechnical instability. The neighbouring properties have similar elevation and geomorphology to the subject property. No significant movement attributed slope instability was observed in the existing buildings.

We recommend that all the retaining walls not in need of urgent attention are to be monitored and if any further significant movement is observed then appropriate action is to be taken at this time. Two small landscaping timber retaining walls identified above are in a dilapidated state. These retaining walls will need to be repaired or replaced or removed and a permanent batter of 1.0m Vertical 1.7m Horizontal put in its place.

The proposed alterations and additions are planned to use existing foundations where possible however will require minimal excavation for new staircase footings required. The depth to the underlying weathered rock is approximately 1.0 to 2.0 metres depending on the slope and the presence of fill material. As the light weight timber staircase does not require a large bearing capacity we recommend the foundations of the front new staircase is to be taken natural undisturbed clay material with a minimum

allowable design bearing capacity of 100 kPa. As these foundations are not taken to the under weathered rock the possibility of small movement over time due to the creep of the slope material is possible over the life to the structure.

The property appears stable by inspection and accordingly the proposed development will have an Acceptable Risk Level in accordance with the 2009 Geotechnical Risk Management Policy for Northern Beaches Council – Pittwater subject to the recommendations above and good engineering practice for the structural design and construction methods.

HODGSON CONSULTING ENGINEERS PTY LTD.



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