

**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 4 (As per Pittwater LEP Geotechnical Risk Management Policy) – To be submitted
with Application for a Building Certificate/Response to an Order**

Building Certificate Application	
for	<u>Sarah de Possesse</u>
	Name of Applicant
Address of Site	<u>4 Kemble Place, Bilgola Plateau NSW</u>
Order No.	N/A

Declaration made by geotechnical engineer in relation to the submission of an application for a Building Certificate

I, Ben Morgan on behalf of AscentGeo Geotechnical Consulting
(Insert Name) (Trading or Company Name)


on this the 8 June 2023
(Date)

certify that I am a geotechnical engineer as defined by the Geotechnical Risk Management Policy for Pittwater 2009. I am authorised by the above organization/company to issue this document and to certify that the organization/company has a current professional indemnity policy of at least \$2million *(reduced from 10 million with reference to approval from Mr Simon Gray, Manager Development Engineering and Certification, Northern Beaches Council, 3 November 2020).*

- I have inspected the site and the existing development and am satisfied that both the site and the development achieves at least the "Tolerable Risk Management" requirement of the Geotechnical Risk Management Policy for Pittwater - 2009. The attached report provides details of the assessment in accordance with the Geotechnical Risk Management Policy for Pittwater – 2009. The report also contains recommendations as to any reasonable and practical measures that can be undertaken to remove foreseeable risk. I am aware the Council will rely on this certification as the basis for ensuring that the geotechnical risk management aspects of the site and the development have been adequately addressed to achieve at least a "Tolerable Risk Management" level for the life of the structure taken as 100 years unless otherwise stated and justified in the Report.*
- or
- I have inspected the site of the existing development. The attached report details the remedial actions required to be undertaken prior to me being prepared to certify that the site and the development achieves at least the "Tolerable Risk Management" criteria required in accordance with the Policy.

Geotechnical Report Details:

Report Title:	Geotechnical Assessment Report related to As-Built Studio to be Retained at 4 Kemble Place, Bilgola Plateau (AG 23219)
Report Date:	8 June 2023
Author:	Ben Morgan, AscentGeo Geotechnical Consulting

Signature 

Name Ben Morgan

Chartered Professional Status MAIG RPGeo (Geotechnical & Engineering)

Membership No. 10269

Company AscentGeo Geotechnical Consulting


* Note: If life of structure taken as less than 100 years, please indicate years

Geotechnical Assessment

For Building Information Certificate Application

Related to As-Built Studio at

4 Kemble Place, Bilgola Plateau NSW

Document Status		Approved for Issue		
Version	Author	Reviewer	Date	
1	Cameron Young BEnvSci Geol MAIG	 Ben Morgan BScGeol MAIG RPGeo	28.06.2023	
Document Distribution				
Version	Copies	Format	To	Date
1	1	PDF	Sarah de Possesse	28.06.2023

Limitations

This report has been prepared for Sarah de Possesse, in accordance with AscentGeo's fee proposal dated 7 June 2023.

The report is provided for the exclusive use the property owners and their nominated agents for the specific development and purpose as described in this report. This report must not be used for purposes other than those outlined in the report or applied to any other projects.

The information contained within this report is considered accurate at the time of issue with regard to the current conditions onsite as identified by AscentGeo and the documentation provided by others.

The report should be read in its entirety and should not be separated from its attachments or supporting notes. It should not have sections removed or included in other documents without the express approval of AscentGeo.

Overview

Background

This report presents the findings of a geotechnical assessment carried out at 4 Kemble Place, Bilgola Plateau NSW ('the Site'), by AscentGeo. This assessment has been prepared to accompany an application for Building Information Certificate (BIC) with Northern Beaches Council related to the construction of an unauthorised studio, to be retained at the rear of the existing dwelling.

Relevant Instruments

This geotechnical assessment has been prepared in accordance with the following relevant guidelines and standards:

- Northern Beaches Council – Pittwater Local Environment Plan (LEP) 2014 and Pittwater Development Control Plan (DCP) 2014
- Appendix 5 (to Pittwater P21) Geotechnical Risk Management Policy for Pittwater – 2009
- Australian Geomechanics Society's 'Landslide Risk Management Guidelines' (AGS 2007)
- Australian Standard 1726–2017 Geotechnical Site Investigations
- Australian Standard 2870–2011 Residential Slabs and Footings.
- Australian Standard 1289.6.3.2–1997 Methods of Testing Soils for Engineering Purposes
- Australian Standard 3798–2007 Guidelines on Earthworks for Commercial and Residential Developments.

Site Description

Summary

A summary of site conditions identified at the time of our inspection is provided in Table 1.

Table 1. Summary of site conditions

Parameter	Description
Site visit	Cameron Young, Engineering Geologist – 07/06/2023
Site address	4 Kemble Place, Bilgola Plateau NSW– Lot 70 in DP 25341
Studio description	Single storey, timber clad studio supported on steel posts.
Neighbouring environment	Residentially developed to the north and west. Private driveway to the south. Cul-de-sac of Kemble Place to the north-west.



Image 1. Site location – 4 Kemble Place, Bilgola Plateau NSW (© SIX Maps NSW Gov)

Description of As-Built Works

This assessment relates to the unauthorised construction of a studio on the south-eastern rear of the existing dwelling (Photo 1). The structure is a single storey timber clad studio supported on steel posts, founded on concrete pier footings bearing on sandstone bedrock, as confirmed in statutory declaration (attached at the end of this report) by the builder Shayne Price, builders licence # 280310C.

Geology and Geological Interpretation

The Sydney 1:100,000 Geological Sheet 9130 (NSW Dept. Mineral Resources, 1983) indicates that the site is underlain by Middle Triassic Hawkesbury Sandstone (Rh). The Hawkesbury rock is typically comprised of medium to coarse-grained quartz sandstones, minor shale and laminite lenses.

The soil profile consists of shallow uncontrolled silty/sandy fill and organic silty/sandy topsoil (O & A Horizons), silty/sandy clay (B Horizon), and weathered sandstone bedrock (C Horizon) which is exposed at the surface at the rear of the existing house, in various locations in the surrounding areas.

Subsurface Investigation

For the purposes of this assessment, our prior experience in the local area, observation of the surface features and conversation with, and statutory declaration from the builder, is considered sufficient for the preparation of this report and thus no subsurface testing was undertaken.

Geotechnical Hazards

The as-built studio is considered to be well constructed and has been founded directly upon foundation material with an allowable end bearing pressure appropriate for the structural requirement for the safe construction of structures of this type.

The as-built existing studio is considered suitable for the site. Its construction does not constitute a significant geotechnical hazard, nor does it compromise the stability of any existing landforms or structures on or adjacent to the site.

Risk Assessment

With reference to the Australian Geomechanics Societies definitions, the as-built existing studio to be retained, as described above, is considered to constitute an **'ACCEPTABLE'** risk to life and a **'LOW'** risk to property.

Summary & Recommendations

It is our opinion that the as-built studio has been well-constructed and does not constitute a significant geotechnical risk to either property or life. The studio has been constructed appropriately with respect to the specific geological and geotechnical context of the site, and the requirements of the structure.

We recommend that sandstone landscaping boulders leaning against some of the steel post footings be removed, to eliminate point loads from landscaping materials impacting on the posts.

No further Geotechnical Assessment related to the as-built existing studio, as described above, is considered necessary.

Should you have any queries regarding this report, please do not hesitate to contact the author of this report, undersigned.

For and on behalf of **AscentGeo**,



Ben Morgan BScGeol MAIG RPGeo
Managing Director | Engineering Geologist



References

Australian Geomechanics Society (March 2007), Landslide Risk Management, Australian Geomechanics 42(1).

Australian Standard 1289.6.3.2–1997 Methods of Testing Soils for Engineering Purposes.

Australian Standard 1726–2017 Geotechnical Site Investigations.

Australian Standard AS2670.1–2001 Evaluation of human exposure to whole-body vibration. Part 1: General requirements.

Australian Standard 2870–2011 Residential Slabs and Footings.

Australian Standard 3798–2007 Guidelines for Earthworks for Commercial and Residential Developments.

Herbert C., 1983, Sydney 1:100 000 Geological Sheet 9130, 1st edition. Geological Survey of New South Wales, Sydney.

NSW Department of Finance, Services and Innovation, Spatial Information Viewer, maps.six.nsw.gov.au.

Safe Work Australia (October 2018). Code of Practice: Excavation Work.



Photo 1. As-built studio

Commonwealth of Australia
STATUTORY DECLARATION
Statutory Declarations Act 1959

1 Insert the name, address and occupation of person making the declaration

I, Shayne Price 31 Paroo RD Holgate NSW 2251 – Builder lic # 280310C of Custom Creations PTY LTD

make the following declaration under the *Statutory Declarations Act 1959*:

2 Set out matter declared to in numbered paragraphs

I confirm that I was the builder of the timber cabana at the rear of 4 Kenble Place, Bilgola Plateau.

I was present when the foundations were excavated, and when the concrete footings were poured.

All footings for the cabana structure were minimum 500mm x 500mm x 600mm Deep and have been taken to sandstone bedrock/~~firm ground of the natural soil profile~~

SR

I understand that a person who intentionally makes a false statement in a statutory declaration is guilty of an offence under section 11 of the *Statutory Declarations Act 1959*, and I believe that the statements in this declaration are true in every particular.

3 Signature of person making the declaration

3



4 [Optional: email address and/or telephone number of person making the declaration]

4

5 Place
6 Day
7 Month and year

Declared at ⁵ Gosford Police Station on ⁶ 13th of ⁷ JUNE 2023

8 Signature of person before whom the declaration is made (see over)

8



9 Full name, qualification and address of person before whom the declaration is made (in printed letters)

9

Senior Constable Adam Boulter,
9-11 Mann Street, Gosford NSW

10 [Optional: email address and/or telephone number of person before whom the declaration is

10

43235599.