

# MM Geomechanics PTY LTD

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Level 2, 25 Ryde Road

PYMBLE NSW 2073



Sydney, 12 February 2022

Mr Graham Garnett  
Outdoor Living Constructions  
3 Livingstone Avenue  
BAULKHAM HILLS NSW 2153

Dear Graham,

**RE: FORMS 1 AND 1A OF GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER – 2009  
PROPOSED SWIMMING POOL, 31 BUNGOONA AVENUE, ELANORA HEIGHTS NSW 2101**

The enclosed Forms 1 and 1A of the Geotechnical Risk Management Policy for Pittwater – 2009 is complementary to the geotechnical investigation report reference MMGEO2022OLC\_AA dated 12 February 2022 prepared by MM Geomechanics. The forms were required as part of the Development Application (DA) process.

Should you require further clarification, please contact us on 0400 393 008.

For and on behalf of **MM Geomechanics**,

**Muliadi Merry** BEng MEng FIEAust CPEng NER (Civil) RPEQ  
Chartered Professional Engineer (CPEng) 1401340  
Registered Professional Engineer of Queensland (RPEQ) 24119  
Professional Engineer Registration – #PRE0000542  
Design Practitioner – #DEP0000552  
Principal Design Practitioner – #PDP00001180

Attachment: Completed Forms 1 and 1A of Geotechnical Risk Management Policy for Pittwater – 2009

2/12/22 5:22:00 PM  
MMGEO2022OLC\_AB.docx

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

Development Application for Matthew Knight

Name of Applicant

Address of site 31 Bungoon Avenue, Elanora Heights, New South Wales

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

I, Muliadi Merry on behalf of MM Geomechanics  
(Insert Name) (Trading or Company Name)

on this the 12<sup>th</sup> February 2022 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 \$10million.

I:  
**Please mark appropriate box**

- ☐ have 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
- ☐ 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 Section 6.0 of the Geotechnical Risk Management Policy for Pittwater - 2009. I confirm that 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 I am of the opinion that the Development Application only involves Minor Development/Alteration that 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.
- ☐ have examined the site and the proposed development/alteration is separate from and is 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.
- ☐ ~~have provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report~~


**Geotechnical Report Details:**

Report Title: Geotechnical Report, Proposed Swimming Pool,  
31 Bungoon Avenue, Elanora Heights, New South Wales  
Report Date: 12 February 2022  
Author: Muliadi Merry  
BEng MEng FIEAust CPEng NER RPEQ  
Author's Company/Organisation: MM Geomechanics

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

A design drawing reference DA.P1.02 dated 26 January 2022 prepared by Scenic Pools.  
A site plan reference DA.P1.01 dated 26 January 2022 prepared by Scenic Pools.

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 Muliadi Merry .....

Chartered Professional Status CPEng NER (Civil) .....

Membership No. 1401340 .....

Company MM Geomechanics .....

**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER**  
**FORM NO. 1(a) - Checklist of Requirements For Geotechnical Risk Management Report for**  
**Development Application**

Development Application for Matthew Knight  
Name of Applicant  
Address of site 31 Bungoona Avenue, Elanora Heights, New South Wales

*The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk Management Geotechnical Report. This checklist is to accompany the Geotechnical Report and its certification (Form No. 1).*


**Geotechnical Report Details:**

Report Title: Geotechnical Report, Proposed Swimming Pool,  
Report Date: 31 Bungoona Avenue, Elanora Heights, New South Wales  
12 February 2022  
Author: Muliadi Merry BEng MEng FIEAust CPEng NER RPEQ  
Author's Company/Organisation: MM Geomechanics

**Please mark appropriate box**

- ✓ Comprehensive site mapping conducted 4 February 2022  
(date)
- Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)
- Subsurface investigation required  
No Justification .....  
Yes Date conducted .....
- ✓ Geotechnical model developed and reported as an inferred subsurface type-section
- ✓ Geotechnical hazards identified  
Above the site  
✓ On the site  
Below the site  
Beside the site
- ✓ Geotechnical hazards described and reported
- ✓ Risk assessment conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009  
✓ Consequence analysis  
✓ Frequency analysis
- ✓ Risk calculation
- ✓ Risk assessment for property conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
- ✓ Risk assessment for loss of life conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
- ✓ Assessed risks have been compared to "Acceptable Risk Management" criteria as defined in the Geotechnical Risk Management Policy for Pittwater - 2009
- ✓ Opinion has been provided that the design can achieve the "Acceptable Risk Management" criteria provided that the specified conditions are achieved.
- ✓ Design Life Adopted:  
✓ 100 years  
Other ..... specify
- ✓ Geotechnical Conditions to be applied to all four phases as described in the Geotechnical Risk Management Policy for Pittwater - 2009 have been specified
- ✓ Additional action to remove risk where reasonable and practical have been identified and included in the report.  
Risk assessment within Bushfire Asset Protection Zone.

I am aware that Pittwater Council will rely on the Geotechnical Report, to which this checklist applies, as the basis for ensuring that the geotechnical risk management aspects of the proposal 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 Muliadi Merry  
Chartered Professional Status CPEng NER (Civil)  
Membership No. 1401340  
Company MM Geomechanics