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

Development Application for Mr. Paul HYLAND & Ms. Pamela MARSHALL

Name of Applicant

Address of site "Kumale" 949 Barrenjoey Rd, Palm Beach, NSW, 2108

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

I, Dr. Manfred Hausmann, *on behalf of* VDM Consulting Engineers Pty Ltd (Insert Name) (Trading or Company Name)

on this Wednesday, 11 May 2016 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. I have:

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 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 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.
- E Provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report

Geotechnical Report Details:

Report Title: Risk and Geotechnical Engineering Assessment Douglas Partners (2004), Geotech Addendum VDM (2013, 2014 and 2016)
Report Date: various dates
Author: Mr. Richard Lloyd (DP), Mr Mario F Benitez (VDM)
Author's Company/Organisation: Douglas Partners and VDM Consulting Engineers Pty Ltd

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

Survey	
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Architect's drawings Wood Marsh

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 Dr. Manfred Hausmann Chartered Professional Status *CPEng*, *MIEAust*, Membership No. 339258 Company VDM Consulting Engineers Pty Ltd

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER

FORM NO. 1(a) - Checklist of Requirements For Geotechnical Risk Management Report for Development Application

Development Application for Mr. Paul HYLAND & Ms. Pamela MARSHALL

Name of Applicant

Address of site "Kumale" 949 Barrenjoey Rd, Palm Beach, NSW, 2108

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: Risk and Geotechnical Engineering Assessment Douglas Partners (2004), Geotech Addendum VDM (2013, 2014 and 2016)

Report Date: various dates

Author: Mr. Richard Lloyd (DP), Mr Mario F Benitez (VDM)

Author's Company/Organisation: Douglas Partners and VDM Consulting Engineers Pty Ltd

Please mark appropriate box

Comprehensive site mapping conducted 24th November, 2004

- (date)
- Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)
 Subsurface investigation required
 - ³ No Justification- Bore holes + specimens were taken and analysed on the 24th November 2004
 - Yes Date conducted
- Geotechnical model developed and reported as an inferred subsurface type-section
- Geotechnical hazards identified
 - Above the site
 - э 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

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- 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 Dr. Manfred Hausmann Chartered Professional Status *CPEng*, *MIEAust*, Membership No. 339258 Company VDM Consulting Engineers Pty Ltd