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

	FORM NO. 1 – To be submitted with Development Application		
	Development Application forM & N Boray		
	Name of Applicant		
	Address of site 67 Dolphin Crescent, Avalon Beach		
,	Deslaration mode by social anning an engineering and leviet or exected engineer (where employed) as not of a		
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)		
	the <u>20<sup>th</sup> June, 2021</u> certify that I am a geotechnical engineer or engineering geologist or coastal engineer ned by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue cument 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 fro 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: 67 DOLPHIN CRESCENT, AVALON BEACH. Geotechnical letter for alterations and additions- QP 00232A		
	Report Date: 11 <sup>th</sup> June, 2021		
	Author : Garth Hodgson		
	Author's Company/Organisation : HODGSON CONSULTING ENGINEERS PTY LTD		
Documentation which relate to or are relied upon in report preparation:			
Drawings prepared by Alinea Dzine Pty Ltd, Dwg No: 20034-1 to 10 and dated June 2021.			
Applica the pro taken a	ware that the above Geotechnical Report, prepared for the abovementioned site is to be submitted in support of a Development tion for this site and will be relied on by Pittwater Council as the basis for ensuring that the Geotechnical Risk Management aspects of posed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been ad to remove foreseeable risk.		

Signature			
Name Garth Hodgson			
Chartered Professional Status MIE Aust			
Membership No.	2211514		
Company	Hodgson Consulting Engineers Pty Ltd		



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## GEOTECHNICAL | CIVIL | STRUCTURAL

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

Dear Sir,

## **67 DOLPHIN CRESCENT, AVALON BEACH.** <u>Geotechnical letter for alterations and additions</u>

A Geotechnical Site Inspection was carried out at the subject address on the 26<sup>th</sup> April, 2021. 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 a new extension to the existing residence and deck and the widening of the existing carport at the front of the existing residence. Also, it is proposed to extend the external wall of Bedroom 2 at the rear of the existing residence. Excavation is only required for the proposed pier foundations. Details of the proposed alterations and additions are shown on the plans prepared by Alinea Dzine Pty Ltd, Dwg No: 20034-1 to 10 and dated June 2021.



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## GEOTECHNICAL | CIVIL | STRUCTURAL

The site is on the high side of the Dolphin Crescent and is accessed by a concrete driveway on south eastern corner of the site. The steep slope rises predominately to the north at average angles of 15 to 25 degrees. The neighbouring properties have similar elevation and geomorphology to the subject property. 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.

We recommend the pier foundations for the front extensions are to be taken to the weathered rock material approximately 1.0 to 2.0 metres below natural ground levels or deeper where fill material is encountered. The piers that support the front extension structure are to be socketed into weathered rock material by at least 0.3m. The proposed carport extension is to be suspended so as not to affect or add additional loads to the existing restraining walls. The piers that support the carport extension structure are to be socketed into weathered rock material by at least 0.5m. The rear Bedroom 2 extension is to be founded on a minimum of undisturbed natural material, however we recommend to avoid differential settlement that the foundations should be placed on similar material to the existing residence rear foundations. The design allowable bearing capacity for the likely weathered rock to be encountered is a minimum 450 kPa.

The proposed development is to be constructed with only the excavations required for the proposed pier foundations. Any foundations inside the zone of influence of the existing retaining walls are to be taken deeper to till they are outside the zone of influence.

It is essential that the foundation materials of all footing excavations be inspected and approved before concrete is placed. This includes retaining wall footings. Failure to advise the geotechnical engineer for these inspections could delay the issuance of relevant certificates.

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 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