From: Rebecca Overton **Sent:** 7/03/2023 3:27:07 PM

Jent. 1/03/2023 3.27.07 FW

To: Council Northernbeaches Mailbox

Subject: TRIMMED: Application Number: DA2022/2277. Attn Officer Adam

Susko

Attachments: 272 Whale Bch Rd - Geotech Peer Review Report.pdf;

Dear Mr Susko

Please find attached a submission regarding the DA for 272 Whale Beah Rd, Whale Beach, which neighbours our property at 274 Whale Beach Rd.

We have concerns regarding the geotechnical report which was submitted as part of the DA. We have commissioned an independent peer review of the submitted report and attach the peer review for your consideration.

We are concerned about the depth of the excavation, the risk of destabilisation of the slope as an excavation is undertaken, and whether the submitted report meets Council requirements as it is very light on detail, it was written before the architectural plans were drawn up, it was very limited in its investigation, it is missing Forms 1 and 1A and it appears to have been submitted by an unregistered engineer.

I would be very grateful for an acknowledgment of my email. Many thanks, Best wishes, Rebecca Overton



Crozier Geotechnical Consultants Unit 12/42-46 Wattle Road Brookvale NSW 2100 Email: info@croziergeotech com au Crozier Geotechnical Consultants a division of PJC Geo - Engineering Pty Ltd

> Date: 3 March 2023 No. Pages: 3

ABN: 96 113 453 624

Phone: (02) 9939 1882

Project No.: 2023-030

Rebecca Overton

Geotechnical Review of Geotechnical Report for Proposed Development at 272 Whale Beach Road, Whale Beach.

We understand that a development application (No.: 2022/2277) for a proposed new dwelling has been submitted for the property No. 272 Whale Beach Rd, which neighbours your property to the west. As such, you have requested a review of the geotechnical report submitted with the development application.

As a result we have reviewed the following submitted documents, as available from the Council's online system:

- 1. Geotechnical Report titled "Proposed Knockdown Rebuild 272 Whale Beach Road, Whale Beach, NSW, Site Classification and Slope Stability Risk Assessment Report; Reference: JS/S1589, Dated: 21 July 2022
- 2. Architectural Design by Avenue on Design, Project no.: A0242, Issue: G, Dated: 23 December 2022
- 3. Survey drawing by Wumara Group, reference: 080722DF2, Dated: 20/07/2022, Issue: 2.

It is understood from these plans that development involves demolition of all existing structures and the construction of a new residential dwelling. The new structure will involve a 5 storey dwelling formed at various levels, that will step up the slope towards the north. From the survey and architectural drawings, and using an anticipated slab/footing thickness of 0.40m, the development will involve bulk excavation to approximately:

•	Basement/Garage –	7.20m at north-west corner,			7.00m at north-east corner			
•	Lower Ground Floor -	4.17m	"	"	,	5.70m	"	"
•	Ground Floor -	2.91m	"	"	,	2.21m	"	"
•	First Floor -	0.26m	"	"	,	6.00m	"	"
•	Second Floor –	1.86m	"	"	,	2.86m	"	"

The following approximate separation distances for the excavations, to the east and west boundaries, are required (including any groundwater drainage system) to complete the proposed development based on the submitted architectural plans:

•	Basement/Garage	6.80m east,	0.70m west boundary		
•	Lower Ground Floor	0.80m "	1.05m "		
•	Ground Floor	0.70m "	0.70m "		
•	First Floor	1.30m "	1.30m "		
•	Second Floor,	3.70m "	1.90m "		



The site is designated as being within a H1 landslip hazard zone by the Geotechnical Risk Management Policy for Pittwater - 2009. To meet the Councils Policy requirements for land classified as H1 a detailed Geotechnical Report which meets the requirements of Paragraph 6.5 of that policy is required for submission with a Development Application.

The policy objectives are reproduced below:

3.1 Policy Objectives

The objectives of this Policy are to ensure that:

- (a) geotechnical and related structural matters are adequately investigated and documented by applicants or proponents of activities prior to the lodgment of any development application to carry out any development subject to this Policy, or wherever an application is lodged for a Building Certificate,
- (b) the proposed development activity is appropriate and relevant conditions that should be applied if it is to be carried out, are identified, having regard to the results of the geotechnical and related structural investigations,

Geotechnical Risk Management Policy for Pittwater - 2009

- (c) in the event that a proposed development activity is only appropriate if carried out subject to geotechnical and related structural engineering conditions, those geotechnical conditions are identified by applicants prior to lodgment of the development application are able to be met, including all appropriate constraints and remedial maintenance actions required prior to, during and after the carrying out of the development,
- effective geotechnical conditions are specified in the Geotechnical Reports and are incorporated into the architectural and structural engineering design plans at the Construction Certificate stage,
- (e) the preparation of geotechnical and related structural engineering information and certificates required to be lodged by this Policy are carried out by suitably qualified professionals with appropriate expertise in the applicable areas of engineering, and
- (f) developments are only carried out if geotechnical and related structural engineering risks, and where appropriate coastal process risks, are identified and can be effectively addressed and managed for the life of the development.
- (g) the development is constructed in accordance with the recommendations of the Geotechnical Engineer/Engineering Geologist and verified by the Geotechnical Engineer/Engineering Geologist.
- (h) ongoing requirements to maintain the integrity of the geotechnical solution as contained in consent are effectively carried out to the specified requirements for the life of the development.

The submitted geotechnical report does not comply with the Policy requirements or its objectives and does not relate to the design as submitted to Council in the development application.

- The geotechnical report is dated 21 July 2022 which is before the Issue A (29 August 2022) of the architectural design and well before Issue G (Issued for Da Approval) (23 December 2022).
- The report does not reference the relevant Council policy or the sites H1 landslip hazard zoning providing no certainty that the site zoning or policy where considered in its preparation

3

CROZIER GEOTECHNICAL CONSULTANTS

> The report is not accompanied by Forms 1 and 1a of the policy, as is required for submission and acceptance of the report by Council, and which confirm that engineer has assessed the conditions as per the policy and holds Professional Indemnity Insurance

• It appears authored by an unregistered engineer (no registration details listed).

 The report references "only shallow excavations will be required" however bulk excavations of up to approx. 7.0m depth are proposed across the site extending to within proximity of both side property boundaries and neighbouring residential dwellings

 The architectural design details a "saw cut sandstone edge" to the Gym/Studio level, however the report provides no recommendations regarding suitable equipment or ground vibration control

• Investigation upon which the report is based is limited to visual inspection and the conducting of one DCP test and two boreholes that extended through soils before being terminated at ≤1.70m depth within soils without identification of bedrock.

• The report provides a series of potential landslide hazards and treatment options, none of which appear site or development specific.

• It provides no description of adjacent properties or conditions/hazards with these properties that could be impacted by or impact upon the development (i.e. boulders, stabilised outcrops)

• The report provides no recommendations for excavation support systems, provides no parameters for design and assessment of retention systems

The geotechnical report supplied does not meet the Council's policy requirements or objectives and as such should not be accepted by Council with the Development Application. It provides limited assessment which does not appear site or development specific, provides no design or construction recommendations to maintain stability within the "Acceptable Risk Management" criteria and involved very limited and shallow investigation for what are deep excavations into the hill slope that have high potential for detrimental impact on adjacent properties and structures.

As such, should approval of the proposed development occur based on the supplied geotechnical report, then serious concerns should be held for the stability and protection of your property and house.

Yours faithfully,

Troy Crozier

Principal

MIE Aust.; MAIG.

RPGeo – Geotechnical and Engineering