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Peter Stutchbury Architecture Unit 5/364 Barrenjoey Road Newport NSW 2106 Project 85136.01 8 February 2019 C.001.Rev1 GSY

Attention: Stefano Manuelli

Email: stefano@peterstutchbury.com.au

Dear Stefano Manuelli

New Residential Development 295 Whale Beach Road, Whale Beach

## 1. Introduction

It is understood that you are preparing a Section 96 application for building a new retaining wall along the western boundary of 295 Whale Beach Road, Whale Beach and that a geotechnical assessment is required.

Douglas Partners Pty Ltd (DP) has previously prepared a report for the site, Project 85136.00, "Geotechnical Assessment for Proposed Residence, 295 Whale Beach Road, Whale Beach" dated 15 December 2015 for the existing DA and Consent N0565/15.

## 2. Proposed Work

The proposed works are for a new retaining wall some 15 m long, ranging in height from approximately 0.5 m to 1.6 m along the western boundary. The details are shown on the architectural Drawing, DA 110, dated 29 January 2019 by Peter Stutchbury Architecture.

## 3. Comments

The geotechnical details for the design and construction of retaining walls have been previously addressed in the original geotechnical report for the site (Project 85136.00) and are still considered applicable for the proposed new retaining wall which is the subject of a Section 96 application.

That is, the foundations should bear on bedrock with a maximum allowable bearing pressure of 1000 kPa and the walls should be designed using active earth pressures.





The active earth pressure coefficients given in the report assume a level ground behind the wall, but the architectural drawings indicate a sloping ground behind the wall with a maximum slope of 2H:1V. This being the case, the active earth pressure coefficients for the design of the proposed retaining wall should be increased to 0.6 for the filling, colluvium and sandy clay soils and 0.2 for the weathered rock.

The original geotechnical report for the site is still considered relevant for other geotechnical issues. For example, the proposed retaining wall does not change the slope instability risk assessment. Other items in the report, such as footing inspections, are still applicable for the site.

We trust that the above is suitable for your purposes. Please contact the undersigned if you have any questions on this matter.

Yours faithfully

**Douglas Partners Pty Ltd** 

Reviewed by

**Geoff Young** 

Principal

Konrad Schultz Principal