## Dear Sir

## Geotechnical Comment

## Section 4.55 Modification to Development Application 967 Barrenjoey Road, Palm Beach

Further to our previous report 35470.08.R.001.Rev1 dated 26 August 2019, Douglas Partners Pty Ltd (DP) has been asked to comment on the geotechnical issues relating to a Section 4.55 modification to the Development Application (DA 2019/1366) for the above property.

Architectural drawings CC101 to CC109 (dated 21.8.20) by Blue Sky Building Designs have been provided for our review.

The drawings indicate that the amendments comprise:

- variation for structural retaining walls and related excavation, and
- minor amendments to pool including to access stairs and addition of a spa.

Specifically DP understands that the amended proposal is to build a main structural retaining wall across the site under the back of the pool, which then turns parallel to the southern boundary. A minor modification is also proposed regarding reconfiguration of a section of retaining wall on the downslope western foreshore boundary area.

DP has recently undertaken a site inspection and note that demolition of existing structures on the slope is nearing completion.

Demolition of the existing structures has now exposed the stratum in the area of the proposed works and further clarifies the nature and extent of fill and natural soils for-shadowed in the abovementioned report.

We understand that actual levels on site in the proposed pool works generally appear to be lower than recorded in the pre-demolition site survey drawing. This is because the removal of sandstone capping, garden walls/stairs, house footings and tree stumps has materially reduced the current (preexcavation) levels over recorded pre-demolition levels. The demolition works has also exposed under house voids which were previously unrecorded in the pre-demolition site survey.

Notwithstanding the above, DP is advised that the proposed modifications will require some additional excavation into the hillside, below the pool and beyond the foreshore zone (up to 2.5 m total depth).

The reconfigured retaining wall within the foreshore zone however, will allow for a moderated cut to fill balance, along with a reduction in slope of the proposed planting bed surfaces.

Based on our site inspection and the information provided to us, DP considers that (from a geotechnical perspective) the revised scope of site development outlined above and depicted within the abovementioned drawings is feasible and does not require any changes to be made to our previous report. The comments and general recommendations previously provided in our report remain appropriate to the revised scope of development.

Given that the demolition works has now exposed the site to the weather, it would be prudent to complete the above mentioned excavation and retaining works as soon as practicable.

We trust that these comments are sufficient for your present requirements. If further assistance is required, please do not hesitate to contact the undersigned.

Yours faithfully

Douglas Partners Pty Ltd


