

Project 202963.00
29 October 2021
DEM:pc

Ms P Marshall and Mr P Hyland
c/- Walter Barda Design
PO Box 398
Darlinghurst NSW 1300

Attention: Mr Mathew Mariani

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**Geotechnical Assessment, Section 4.55 Amendment
Proposed Carport and Driveway Works
949 Barrenjoey Road, Palm Beach**

Further to our previous Report 30300A dated 3 December 2004, Douglas Partners Pty Ltd (DP) has been asked to comment on the geotechnical issues relating to a Section 4.55 application for the above development. The following updated architectural drawings have been provided by Walter Barda Design for our review:

- Drawings 1001(D), 1002(F), 1301(D) and A1305(F), Project 2017.11, all dated 21 Sept 2021)

The Section 4.45 application changes indicated on the drawings are summarised as follows:

- Relocation of previously approved carport, bin store and parking structure to the top southeast corner of the property
- Formalisation of front pedestrian and vehicular entry gate within the front boundary
- Addition of inclinators along existing front sandstone wall
- Change the existing hard topped driveway into a landscape garden entry path
- Modification to previously proposed entry stairs (redirected to existing front door entry)
- Retention of existing entry door
- Retention of (previously proposed demolition) barrel roof
- Addition of solar panels laid flat in carport roof structure
- Retention of existing trees

Subsequent to our 2004 report, DP undertook test bore drilling within the area of the proposed carport and garage works in 2007 and, more recently, inspected the area on 9 March 2021.

DP has also been provided with a letter report (Reference sd1809-003 dated 6 September 2019) by VDM Consulting Engineers. The VDM report makes references to geotechnical advice (provided by VDM) during other construction on the site undertaken between 2004 and 2018. DP was not involved with that construction and therefore cannot comment on the geotechnical adequacy of those works.

Notwithstanding the above, DP considers that the scope of work outlined in the above architectural drawings for the proposed carport and garage works is consistent with the comments, geotechnical risk assessment and general recommendations for design provided in our 2004 report. Furthermore, it is expected that the level of geotechnical risk on the area of the site where the works are proposed will be maintained at acceptable levels provided the general recommendations in our report are adhered to.

DP understands that Northern Beaches Council has requested that an Acid Sulfate Solis Management Plan be provided for this development.

Reference to the Broken Bay Acid Sulphate Soil Risk Map (Department of Land and Water Conservation - Edition 2, dated December 1997) indicates the bottom estuarine sediments within the adjacent area of Pittwater to have a “high risk” of ASS.

All bulk and detailed footing excavations for the proposed driveway and garage works will be located on the upslope (eastern) side of the property at between approximately RL13 to RL17 m (AHD).

Accordingly, it is expected that the probability of the proposed excavations intersecting any estuarine soils along the Pittwater foreshore will be very low to non-existent.

Consequently, it is considered that preparation of a detailed Acid Sulphate Management plan is not warranted for the proposed development on this site. Notwithstanding this it is recommended that geotechnical inspection of the excavation be undertaken to confirm the nature of any natural soil or filling that is encountered so that appropriate advice regarding its re-use or disposal off-site can be provided.

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

Reviewed by



David Murray
Senior Associate



PP **John Braybrooke**
Principal