

ABDUL ABBAS

Suite 6 Level 1
226 The Boulevard
Punchbowl NSW

GEOTECHNICAL REPORT

Summary of Site classification report

Site Classification Report Number	RG225-GR-1-1
Project Name	Geotechnical Investigation
Site Address	14 Princess Mary Street, Beacon Hill NSW
Date of Field Work	7 th January 2022
Material Description	Colluvial with underlying rock
Borehole IDs	BH1 (0-0.9 m) Residual – Sand Clay, refusal on Sandstone

1. INTRODUCTION

This report presents the findings of a geotechnical investigation carried out by Rapid Geo Pty Ltd (RG) at No. 14 Princess Mary Street, Beacon Hill NSW (the site).

The purpose of the investigation was to assess the subsurface conditions and provide a lot classification in accordance with the “Residential Slabs and Footings” Code AS2870-2011. Any geotechnical constraints encountered during the investigation have been noted in this report and will contribute to the foundation design of the proposed lift foundation.

2. SCOPE OF WORK

In order to achieve the project objectives, the following scope of work was carried out:

- Walkover of current site conditions
- One (1) hand auger drilled borehole and one (1) ‘Dynamic Cone Penetrometer’ (DCP) tests
- Logging and engineering assessment of soil
- Preparation of a geotechnical lot classification report

3. DESKTOP STUDY, PROJECT SPECIFIC INFORMATION AND FIELDWORK ACTIVITIES

Table 3.1 Summary of desktop study, project specific information and fieldwork activities

Geological Survey	The available ‘Geological Survey Maps’ showed the site to be underlain by quartz sandstone. The subsurface profile encountered in the boreholes is consistent with the NSW geological maps.
Site Description	At the time of the inspection the lot had a three storey masonry house that was founded on sandstone bedrock. The site had an approximate 20° inline from the street. The property was bounded by similar residential dwellings on either side of the lot.

Scope of Field Investigation	One (1) borehole was advanced using a hand auger to refusal below surface level. One (1) DCP test was conducted on site near the borehole.
Fieldwork Observations/ Soil Profile	BH1 0.0-0.30 – Topsoil/Fill – Sand with some silt, dark brown, moist, full of organics 0.3-0.90 – Residual – Sandy Clay, yellow/white, slightly moist, firm. 0.9 – Bedrock, inferred class V Sandstone No ground water was observed in BH1 however slight to moderate seepage may occur after a period of heavy rainfall between the rock/soil interface observed at 0.9 m bgl.
Site Classification In Accordance With AS2860-2011	The site can be classed as 'class-A' if the proposed lift footing is founded onto bedrock sandstone.
Allowable Bearing Pressure/ Recommendations	Rapid Geo recommends all structural footings for the proposed structures be founded onto bedrock sandstone to minimise differential settlement (the existing property is founded on bedrock sandstone).
Landslip Risk Class	No evidence of former land instability was observed within the site and surrounding land during the site walkover survey. Based on the site conditions, anticipated sub-surface ground conditions and the proposed development, the risk of potential slope instability, such as landslide or soil creep, is considered to be very low subject to the recommendations provided in this report and the adoption of the relevant engineering standards and guidance given in the Australian Geoguide LR8, a copy of which is attached. A detailed slope risk assessment in accordance with the Australian Geomechanics Society's Landslide Risk Management Guidelines (2007) is not considered necessary for this proposed development. It is recommended that the exposed material at foundation level be inspected during construction by a geotechnical engineer, to verify suitability of the material as foundation prior to pouring the concrete.'
Limitations	If additional fill is encountered during excavation of footings and not described in the field investigation logs then further advice must be obtained prior to placement of the foundations. This may require additional boreholes in order to confirm site conditions. The subsurface profiles depths quoted in this report are measured from the surface during our site investigation and the description of the strata materials has been provided for its easy recognition in general terms over the area. Attached plans and sketches in this report should be considered approximate pictorial evidence of our work. This report is based upon the assumption that the sites conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. The assumption cannot be substantiated until earthworks and construction works start. Where variations in conditions across the described site is encountered further geotechnical advice should be sought
References	• AS1726-1993 - Geotechnical Site Investigations • AS2870-2011 - Residential slabs and Footings Construction

Figure

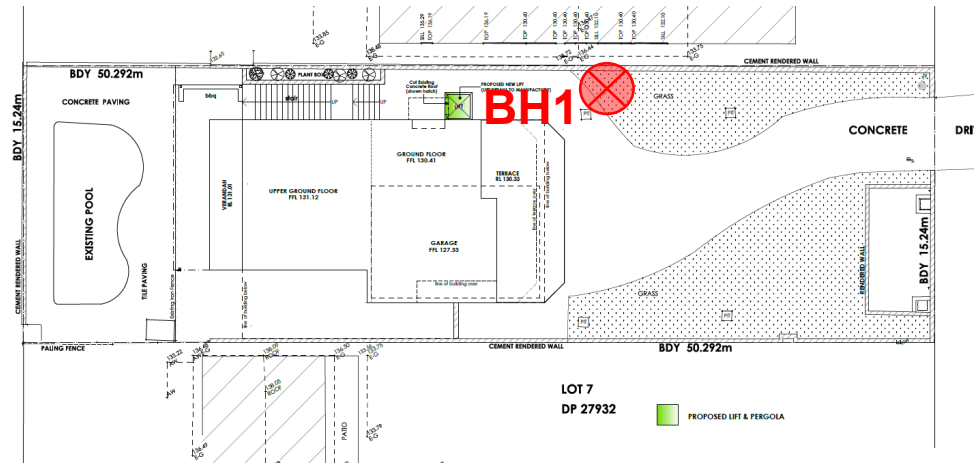


Figure 1 – Location of BH1

Should you need any further information, please do not hesitate to contact us.

Regards,

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