

October 16, 2019
Project No. 30002/3001D-G
Report No. 19/3005
RM/js

PRELIMINARY LANDSLIP ASSESSMENT

Client: Mr Chris Gollan & Ms Susan Austin
Address: 10 Coramba Street, North Balgowlah
Proposed Development: Alterations and Additions

1. Site Description

Approx. area (m²): 470

Approx. fall: 2.0 metres to the east in the backyard and relatively level within the building area, reasonable site drainage

Vegetation: Grass, shrubs and trees in the gardens

Improvements: Existing residential dwelling

2. Geology, Fieldwork Details and Subsurface Conditions

The Sydney geological series sheet, at a scale of 1:100,000 indicates that the site is underlain by Triassic Age Hawkesbury Sandstone bedrock. Bedrock from this formation comprises fine to medium grained quartz sandstone.

A site inspection was undertaken by one of our senior geotechnical engineers on October 9, 2019.

When assessing the subsurface conditions across a site from a site walkover, there is the possibility that variations may occur between the site observations and actual site conditions. The data derived from the site investigation programme are extrapolated across the site to form a geological model and an engineering opinion is rendered about overall subsurface conditions and their likely behaviour regarding the proposed development. The actual condition at the site may differ from those inferred, since no subsurface exploration programme, no matter how comprehensive, can reveal all subsurface details and anomalies.

The subsurface conditions will likely comprise weathered sandstone bedrock within the proposed extension area of the site. There was an approximately 1.5 m high retaining wall to the south of the site bordering the gardens at the rear and existing paved area. The retaining walls were in good conditions with no movement, cracking or building evident at the surface. During our site inspection sandstone bedrock was observed outcropping towards the eastern and southern boundaries of the site.

It is understood that the proposed extension will be constructed within the existing paved area and will encroach into the retaining walls. Therefore, a new retaining wall will need to be constructed along the proposed boundary of the excavations. The area does not appear to have been filled. There were stormwater pipes running along the site boundaries.

No groundwater seepage was observed during the site inspection.

3. Preliminary Landslip Assessment

The development will comprise the construction of a extension to the rear of existing residential dwelling. The maximum cut and fill heights are around 1 metre. The Council landslip hazards map shows the property is within a Class B Landslide Risk Area.

The preliminary landslip carried out is based on Council's check list. The assessment follows:

- Does the site or adjacent properties have a history of slope instability – No.
- Are excavations or fills greater than 2 metres proposed – No.
- Is the site developed – Yes
- Is fill greater than 1.0 m in depth present – No
- Are cuts/excavations greater than 2.0 m high present – No

Based on our observations and Council's check list a detailed landslip assessment will not be required.

We trust this meets with your requirements. Should you have any questions, please contact us.

Yours faithfully,



Rasoul Machiani
Senior Geotechnical Engineer



Matt Green
Principal Engineering Geologist