

PRELIMINARY GEOTECHNICAL ASSESSMENT: **13 Churchill Crescent, Allambie Heights**

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
<input type="checkbox"/>	<i>A - Geotechnical Report not normally required</i>
<input checked="" type="checkbox"/>	<i>B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>C - Geotechnical Report is required</i>
<input type="checkbox"/>	<i>D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>E - Geotechnical Report required</i>

2.0 Proposed Development

- 2.1** Install a new pool on the uphill side of the house by excavating to a maximum depth of ~2.0m.
- 2.2** Landscaping works on the uphill side of the house requiring minor filling.
- 2.3** Details of the proposed development are shown on 10 drawings prepared by Site Design + Studios, drawing number DF_2023, pages numbered L-01 to L-10, Issue D, dated 24/5/24.

3.0 Site Location

- 3.1** The site was inspected on the 23rd October, 2023.
- 3.2** This residential property is on the high side of the road and has a S aspect. It is located on the gently graded upper reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops at various locations across the property. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered with low cuts and fills for paved, lawn and garden areas across the property. The proposed pool will

require an excavation to a maximum depth of ~2.0m and the proposed landscaping works will require minor filling.

3.3 The site shows no indications of historical movement in the natural surface that could have occurred since the property was developed. We are aware of no history of instability on the property.

4.0 Site Description

The natural slope rises across the property at an average angle of ~5°. At the road frontage, a concrete driveway runs up the slope to a garage below the house. Medium Strength Sandstone bedrock outcrops in the SW corner of the property. A low mortared sandstone block retaining wall along the W common boundary beside the outcropping rock supports fill on the W neighbouring property. The wall is tilting significantly downslope towards the subject property, but due to its low height and location, it is not considered a significant threat to life or property. The part two storey brick and clad house is supported on brick walls and piers. The visible external supporting walls show no significant signs of movement and the visible piers stand vertical. Timber decks extend off the downhill and uphill sides of the house. The area surrounding the house is mostly lawn or garden covered with some paved areas. Low cuts and fills provide level platforms for these areas. No signs of movement related to slope instability were observed on the grounds that could have occurred since the property was developed. No cliffs or large rock faces were observed on the property or in the near vicinity. The adjoining neighbouring properties were observed to be in good order as seen from the street and subject property.

5.0 Recommendations

The proposed development and site conditions were considered and applied to the current Council requirements. Provided good engineering and building practice are followed, no further Geotechnical assessment, apart from the required foundation inspection below, is recommended for the proposed development.

6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.



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Reviewed By:



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Information about your Preliminary Assessment

This Preliminary Assessment relies on visual observations of the surface features observed during the site inspection. Where reference is made to subsurface features (e.g. the depth to rock) these are interpretations based on the surface features present and previous experience in the area. No ground testing was conducted as part of this assessment and it is possible subsurface conditions will vary from those interpreted in the assessment.

In some cases, we will recommend no further geotechnical assessment is necessary despite the presence of existing fill or a rock face on the property that exceed the heights that would normally trigger a full geotechnical report, according to the Preliminary Assessment Flow Chart. Where this is the case, if it is an existing fill, it is either supported by a retaining wall that we consider stable, or is battered at a stable angle and situated in a suitable position on the slope. If it is a rock face that exceeds the flow chart limit height, the face has been deemed to be competent rock that is considered stable. These judgements are backed by the inspection of over 5000 properties on Geotechnical related matters.

The proposed excavation heights referred to in section 2.0 of this assessment are estimated by review of the plans we have been given for the job. Although we make every reasonable effort to provide accurate information excavation heights should be checked by the owner or person lodging the DA. If the excavation heights referred to in in section 2.0 of this assessment are incorrect we are to be informed immediately and before this assessment is lodged with the DA.