

PRELIMINARY GEOTECHNICAL ASSESSMENT:

34 Little Willandra Road, Cromer

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
<input checked="" 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** Construct a new deck over the existing garage on the downhill side of the house.
- 2.2** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 6 drawings prepared by Anthony Lewis, drawings numbered A.01.1, A.01.2, A.02.1, A.02.2, A.03.1, and A.03.2, Issue A, dated 23/1/24.

3.0 Site Location

- 3.1** The site was inspected on the 3rd May, 2024.
- 3.2** This corner residential property is on the low side of Little Willandra Road and is on the high side of Tyagarah Place. The property has an E aspect. It is located on the moderately graded lower reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops and steps down 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 excavations for the house and for landscaping across the property. The proposed development will not alter the surface further for the proposed works.

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 falls across the site at an average angle of $\sim 13^\circ$. The slope between the road frontage to Little Willandra Road and the house has been terraced with a series of stable soldier post retaining walls and stack rock retaining walls. Competent Medium Strength Sandstone outcrops in multiple places across this slope. A low excavation has been taken through one of these outcrops. No significant geological defects were observed in the cut face and it is considered stable. The part two-storey brick house is supported on brick walls and brick piers. The supporting walls display no significant signs of movement and the supporting brick piers stand vertical. Some of the supporting walls and piers were observed to be supported directly onto Medium Strength Sandstone within the foundation space of the house. These outcrops were observed to be undercut to a maximum of $\sim 1.1\text{m}$. One of the undercut joint blocks is supported by the N supporting wall of the house (Photo 1) and both are considered stable. A stable brick garage extends off the downhill side of the house and is accessed from a driveway off Tyagarah Place. Between the garage and the lower boundary is a gently sloping lawn. The area surrounding the house and driveway is mostly lawn-covered with some paved areas. No significant signs of movement associated with slope instability were observed on the grounds. No cliffs were observed on the property or in the near vicinity. No geotechnical hazards that could impact on the subject property were observed on the surrounding neighbouring properties as viewed from the subject property and the street.

4.0 Recommendations

The proposed development and site conditions were considered and applied to the current council requirements. See the required inspection below that is to be carried out during construction and is a requirement for the final geotechnical certification. Apart from the inspection, it is not expected additional geotechnical input will be required provided good design and building practices are followed.

5.0 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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Photo 1

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.
