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## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

# 45 Oxford Falls Road, Beacon Hill

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
	A - Geotechnical Report not normally required
	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
	C - Geotechnical Report is required
	D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
	E - Geotechnical Report required

### 2.0 Proposed Development

- **2.1** Construct a first-floor extension on the S side of the house.
- **2.2** Extend the existing patio on the N side of the house.
- **2.3** Demolish the N portion of the ground floor.
- **2.4** No excavations or fills are required.
- **2.5** Details of the proposed development are shown on 18 drawings by Michal Korecky, project number 18080, drawings numbered 1 to 18, dated 17.04.24.

### 3.0 Site Location

**3.1** The site was inspected on the 1<sup>st</sup> May, 2024.

**3.2** This residential property has dual access. It is on the high side of Oxford Falls Road and on the low side of Dareen Street. The property has a N aspect. It is located on the gentle to steeply graded upper middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops at a rock face on the downhill side of the

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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 little with the development to date. 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

This block is in the process of being subdivided as part of a separate DA. A portion of the existing house spans across the subdivided lots. This portion is to be demolished as part of the proposed works.

From the road frontage with Oxford Falls Road, the natural slope rises at steep angles of ~23° before encountering a rock face. The rock face reaches a maximum height of ~4.5m. From the top of the rock face to the upper boundary, the slope rises at an average angle of ~6°. A steep, densely-vegetated slope rises from the road frontage to Oxford Falls Road to the base of a rock face. No undercutting or other significant geological defects were observed in the rock face and it is considered stable. A gently sloping lawn rises from the top of the rock face to the downhill side of the house. The lawn steps up below the house where the slope is filled. The fill is supported by a ~0.8m high stable concrete block retaining wall. The part two-storey brick and weatherboard clad house is supported on brick walls and brick piers. The external supporting brick walls of the house show no significant signs of cracking and the supporting brick piers stand vertical. A gently sloping lawn rises from the uphill side of the house to the upper boundary. The property is accessed by a concrete Right of Carriageway (ROW) off Dareen Street. The ROW runs to a concrete parking area and stable weatherboard clad garage on the uphill side of the property. The area surrounding the house is mostly paved or lawn covered. No signs of movement associated with slope instability were observed on the



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grounds. The adjoining neighbouring properties were observed to be in good order as seen from the road and the subject property.

## 5.0 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.

### 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.



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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.