

22/10/2024

Owen Carington Smith  
Owner  
349 Simpsons Bay Road  
Simpsons Bay, TAS 7150



**349 SIMPSONS BAY ROAD, SIMPSONS BAY, TAS 7150 – LANDSLIP RISK ASSESSMENT**

Geo-Environmental Solutions Pty Ltd (GES) were contracted by JMG Engineers and Planners on behalf of Owen Carington Smith via email dated 17<sup>th</sup> September 2024 to provide a geotechnical assessment to assess landslide hazard management for a driveway access to the property at 349 Simpsons Bay Road, Simpsons Bay (cadastre title 77511/1; herein referred to as 'The Site').

The site lies within an area mapped low-to medium landslide zone (please refer to Appendix A for design site plan with landslip overlay) in accordance with the Kingborough Interim Planning Scheme as the area has slope in the order of 11-20° and/or greater than 20°. The Kingborough council in an RFI (DA-2024-117, dated 9th Sep 2024) have requested for the proposed works to satisfy the performance criteria of Landslide hazard Code clause E3.7.1 P1 as per the scheme for which there are no acceptable solutions. This memo addresses item 8 of the RFI (refer Appendix B) to address performance criteria clause E3.7.1 P1.

Assuming that the recommendations made in Appendix B of this memo have been implemented on site and the proposed design drawings (refer 'J240448CS - Civil Set - [DA1].pdf') do not undergo any significant design changes especially in terms of cut fill volumes, batter angles and alignment, the development satisfies the conditions of E3.7.1 P1 of the Kingborough Interim Planning Scheme 2015.

I trust this memo meets your current requirement, please do not hesitate to contact undersigned for any further queries or should site conditions depart from the above observations and assumptions.

Regards,

A handwritten signature in black ink, appearing to read 'Gupta', with a horizontal line underneath.

Vinamra Gupta  
*Senior Geotechnical Engineer*

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# APPENDIX A – SITE LAYOUT WITH LANDSLIP OVERLAY



## APPENDIX B – QUALITATIVE RISK ASSESSMENT

Performance Criteria E3.7.1 P1  Buildings and works must satisfy all of the following:	Relevance	Management Options	Managed (treated) Risk Assessment			Further Assessment Required
			Consequence	Likelihood	Risk	
(a) no part of the buildings and works is in a High Landslide Hazard Area;	NA					
<p>(b) the landslide risk associated with the buildings and works is either:</p> <p style="margin-left: 20px;">(i) acceptable risk (means a risk society is prepared to accept as it is. That is; without management or treatment); or</p> <p style="margin-left: 20px;">(ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.</p> <p>The residual tolerable risk may be assessed using either qualitative or qualitative methods in the landslide risk assessment either:</p> <p>(a) if using the AGS qualitative risk assessment method apply the "As Low As Reasonably Possible (ALARP)" principle with the residual tolerable risk level no higher than a "moderate" risk level under the AGS 2007(c) risk method; or</p> <p>(b) if using the AGS quantitative risk assessment method then the tolerable loss of life for the person most at risk as suggested by the AGS 2007(c) to be:</p> <p style="margin-left: 20px;">(i) if existing slope / existing development: 10-4 / annum;</p> <p style="margin-left: 20px;">(ii) if new constructed slope / new development / existing landslide: 10-5 / annum.</p>	Capable of feasible and effective treatment through hazard management measures	<p>Unretained Cuts in soils:</p> <ul style="list-style-type: none"> <li>• Up to a maximum height of 1.0m should have slope angles not exceeding 1V:2H</li> <li>• In exceedance of 1.0m should be benched with 1.0m wide terrace at every 1.0m depth of cutting maintaining a minimum batter slope of 1V:2H. If this is not achievable on site, batters to be retained using suitably engineered retaining wall.</li> </ul> <p>Unretained Cuts in rock:</p> <ul style="list-style-type: none"> <li>• Up to a maximum height of 2.0m should have slope angles not exceeding 1V:1H. In exceedance of 2.0m should be benched with 0.5m wide terrace at every 2.0m depth of cutting maintaining a minimum batter slope of 1V:1H.</li> </ul> <p>The approx. overlay of the proposed works area over the medium landslip zone overlay as indicated in Appendix A is less than 5sq.m and is assumed to have negligible impact on the overall proposed works area.</p>	Minor	Unlikely	Low	No