GES
GEO-ENVIRONMENTAL
SOLUTIONS

01/03/2021

Matt Clark
JMG
117 Harrington Street
Hobart TAS 7000

RE: Geotechnical Conditions – Proposed Residential Development – 30 Holland Court

Matt, following your recent correspondence I have undertaken a review of the site geological conditions and the proposal plans for the residential development on the site. Based upon my review I can provide the following information regarding the site:

- The site is location on the lower slopes of Rokeby hills close to South Arm Road (see figure 1).
- Geological mapping (MRT) in figure 2 indicates that the site is underlain by Permian aged Siltstone on the lower half of the site, and Jurassic dolerite on the upper part of the site.
- It is likely that the siltstone has some degree of contact metamorphism from the dolerite contact which may result in higher localised rock strength.
- The soils developing on the Permian and Jurassic rocks in the local area on north facing slopes are generally known to be shallow.
- This concurs with information from the GES soil testing database of over 20 000 sites in southern Tasmania, with bore logs from sites closeby indicating shallow soils overlying residual bedrock.
- The soils in the local area are typically classified as Class M according to AS2870-2011 for residential construction.
- The upper slopes of the site are overlain by a landslide hazard overlay, due to the slope angles and the underlying dolerite rock (see figure 3).
- However, on examination of road cuttings on the slopes near the site (in Mayfair court) the soils are shallow and the exposed dolerite rock is of high strength and is considered competent and would not pose a risk of mass slope instability for residential development.
- The rock underlying the site is likely to be of high strength and may pose a barrier to significant deep excavation for services with large machinery and ripper/breakers likely to be required.
- In summary no serious impediments to the proposed development were identified during the desktop investigations.

Kind regards,

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD
Director

Figure 1 – Site Location Plan

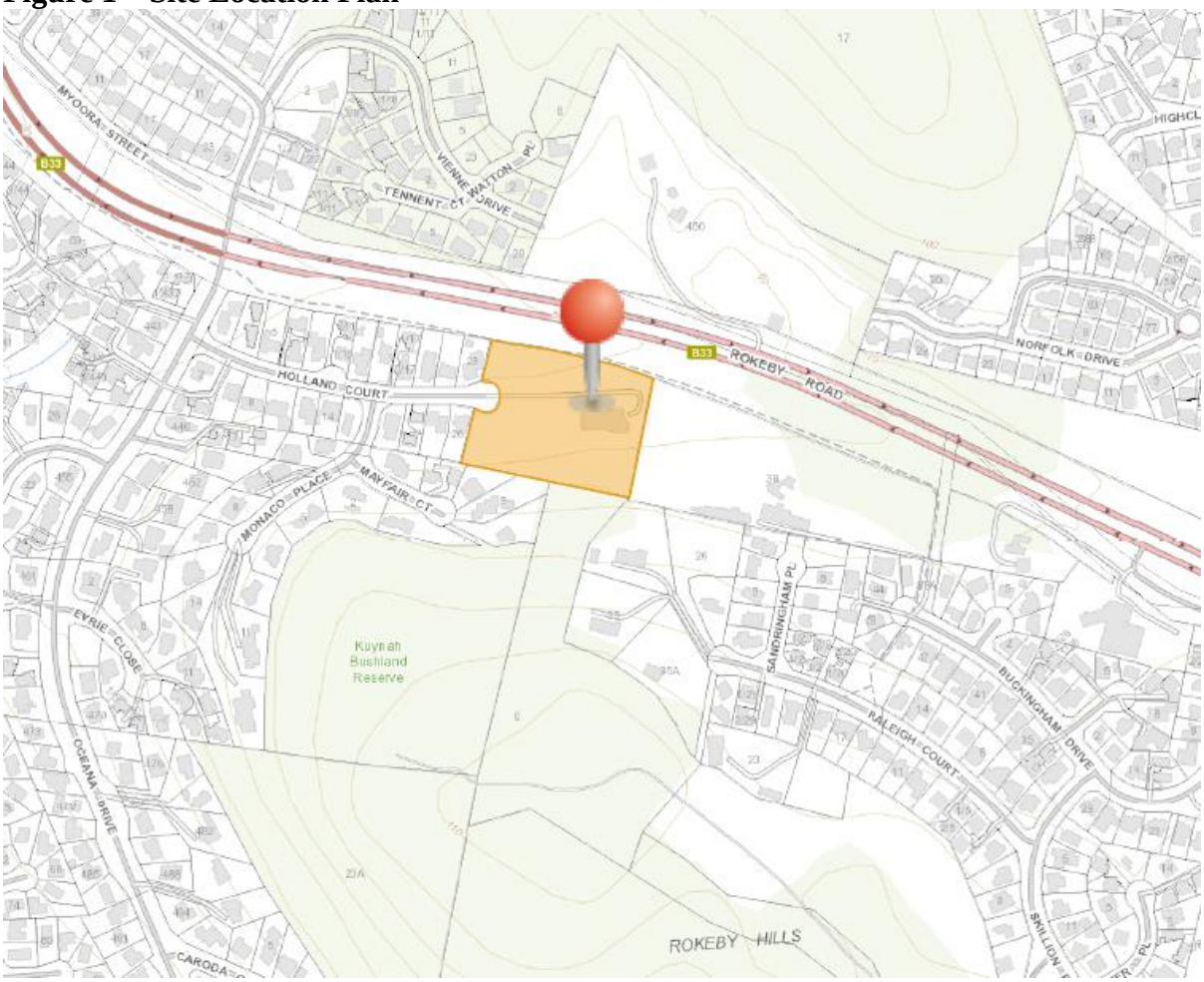


Figure 2 – Geology mapping (1:25 000 MRT)

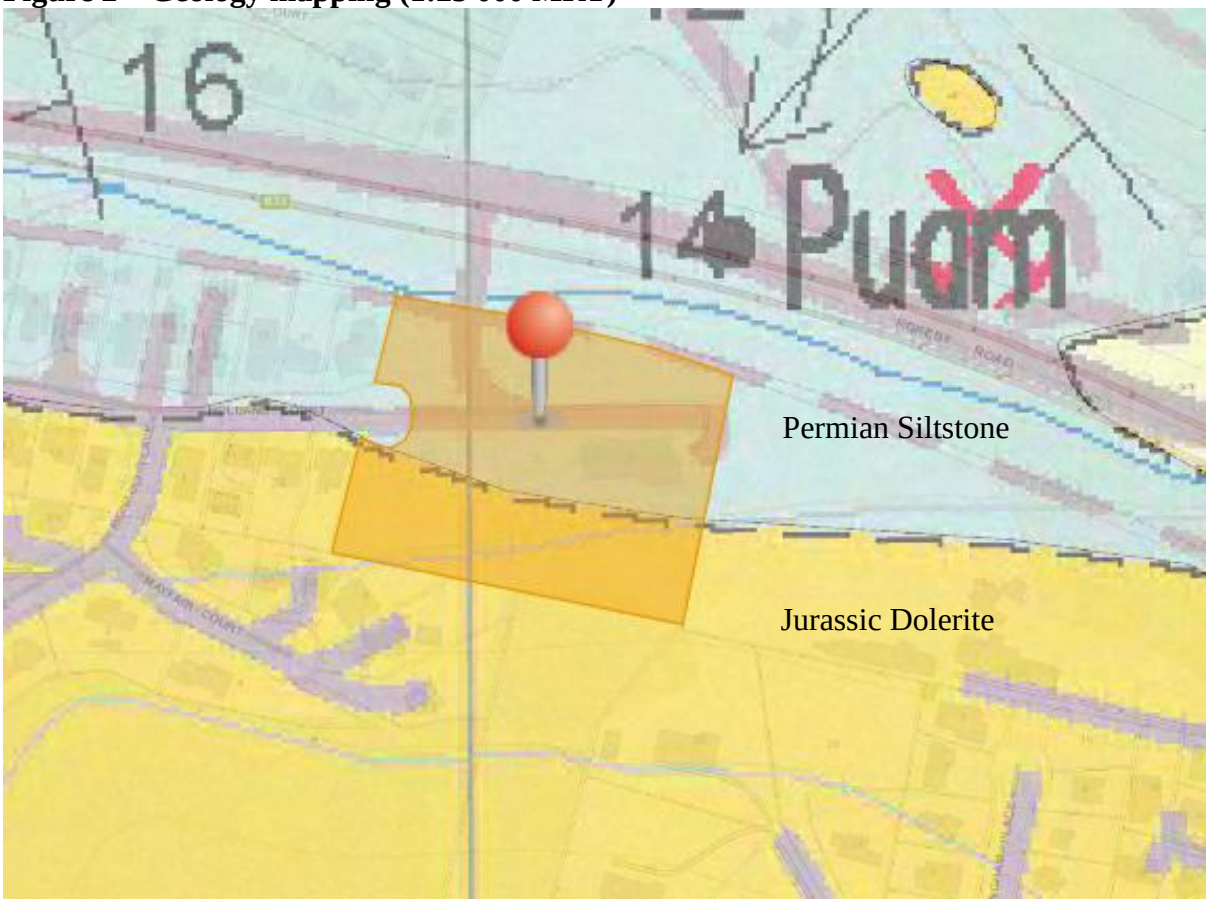
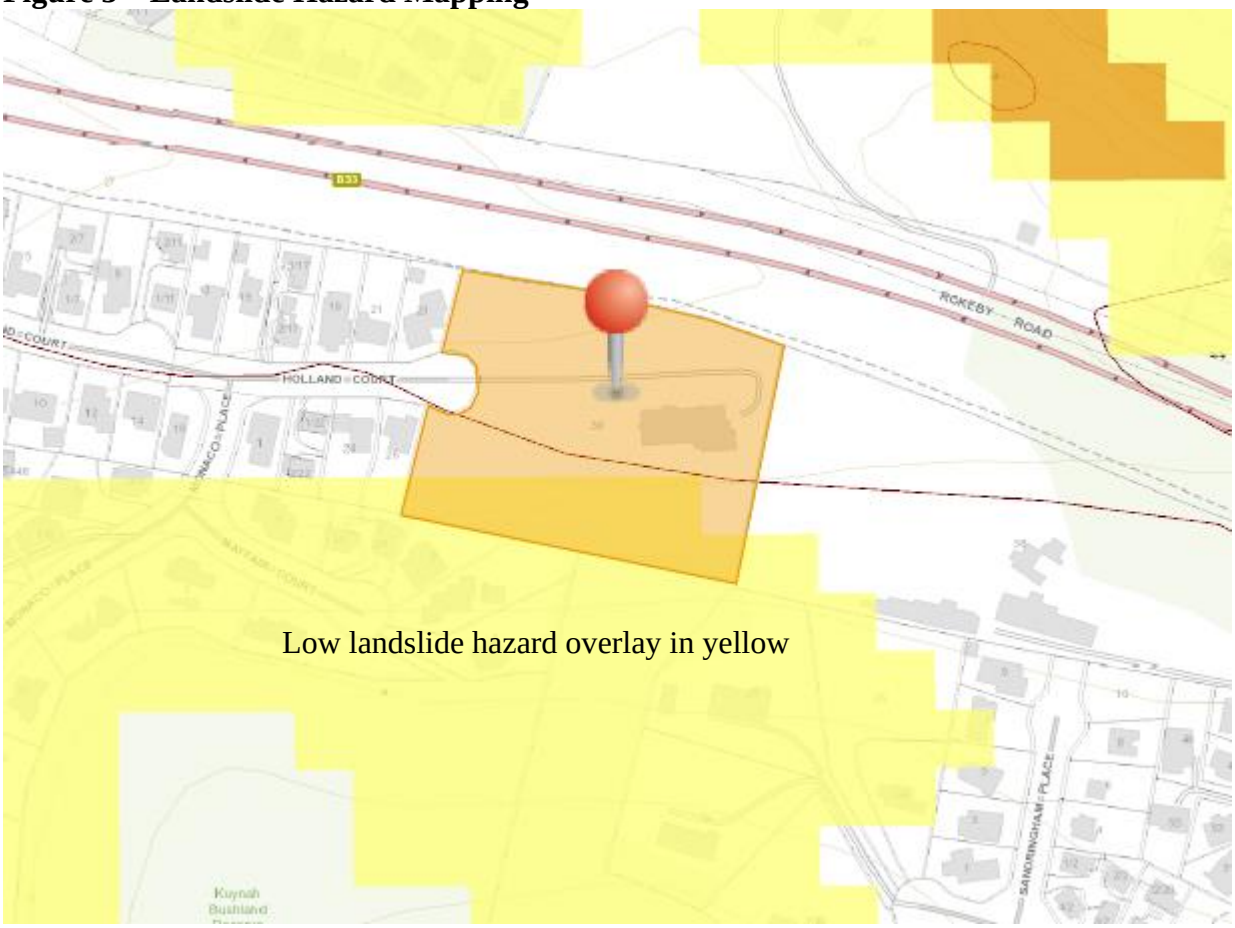


Figure 3 – Landslide Hazard Mapping



Low landslide hazard overlay in yellow