

Darryl Sycamore

From: Z1649206 MWH Hazards Team <SM-AP-NZ-MWHHazardsTeam@mwhglobal.com>
Sent: Friday, 20 January 2017 09:59 a.m.
To: Darryl Sycamore
Subject: RE: Memo request for 1069 Highcliff Rd LUC-2015-481

Hello Darryl

We have assessed the application in relation to the hazard register, street files and available aerial photography on Google Earth, DCC Webmap and Apple high resolution 3D. We have not visited the site. We have the following comments to make regarding the application.

Proposal

The proposed activity is to construct a dwelling and a barn on rural lot which is undersize for residential activity. Site investigation reports have been provided from Dr Jon Lindqvist, Dated April 2016. Plans for the proposal are provided within the application.

Hazards

The property is indicated on the NZ Soils Bureau Scientific Report 12: Landslide Potential on the Otago Peninsula as CLASS 4-SEVERE RISK with the following explanatory notes:

- Situations in which materials of low or moderate shear strength overlie materials of high shear strength with a well-defined surface or potential failure, on gently undulating to rolling slopes that are subject to removal of lateral support or of material from the toe of the slope;
- Situations in which materials of moderate shear strength overlie materials of low shear strength, on rolling to strongly rolling slopes, with a well-defined surface of potential failure at the material interface; failure can occur within the overlying moderate shear strength materials;
- Situations in which low shear strength overlie similar strength materials, on flat or undulating slopes, with a well-defined surface of potential failure at the material interface.

There are no features of mapped landslide instability indicated on the Otago Regional Council mapping by GNS.

Dr Lindqvist's report indicates that the proposed building area and access roads hold no identifiable geotechnical risks.

Global Setting

The property contains some steep slopes in excess of 15°, and the area including and just down slope of the proposed dwelling platform is nearly 20°.

Underlying geology comprises First Main Eruptive phase trachybasalt.

Earthworks / Excavations / Retaining Structures

The extent of earth works appears to be a cut up to 2.5m deep, and with some non-structural fill to the downslope edge of the building platform.

There are no proposed retaining structures.

Discussion

There are no general potential instabilities of concern.

The proposal will not create or exacerbate instabilities on this or adjacent properties.

The application acknowledges risks published risks, and the applicant has sought appropriate professional advice.

Advice

We recommend that advice be made to the effect:-

- Any earth fill over 0.6m thick supporting foundations must be specified and supervised by a suitably qualified person in accordance with NZS 4431-1989 Code of Practice for Earthfill for Residential Development
- The extent of any un-engineered fill should be recorded on an as-built plan in extent and depth to ensure that future land owners do not rely upon this material to support foundations without specific engineering design.
- Slopes may not be cut steeper than 1:1.5 (35°) without specific engineering design and construction
- Slopes may not be filled steeper than 2h:1v (27°) without specific engineering design and construction

Regards

Lee



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