

UR1974-26

Stability of land at Danbury Heights, West Tamar.

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The Town and Country Commissioner requested advice on the stability of a proposed subdivision [EQ045195] of part of the property 'Danbury Heights'. The area (c. 350 ha) lies about 10 km north-west of Launceston near the West Tamar highway.

TOPOGRAPHY AND GEOLOGY

The property is situated on the west side of the highway and the land-surface rises fairly steeply from the road to a low range of hills consisting of NW-SE ridges.

The main rock units present are Tertiary sediments and Jurassic dolerite. The Tertiary sediments were deposited on an uneven surface and subsequent erosion has exposed some of the higher parts of this surface (i.e. dolerite) resulting in a patchy distribution of the dolerite and Tertiary sediments. Small areas of laterite often occur near the contact of the dolerite and sediments. A few boulders of slightly ferruginous sandstone occur in the south-western part of the proposed subdivision, suggesting the possibility that this area might be underlain by Triassic sediments.

DISCUSSION OF STABILITY AND RECOMMENDATIONS

No slips are known to have occurred on the proposed subdivision although there are areas that show small hummocks. These might have been caused by very old slips or could be dolerite talus mounds. Tertiary sediments occur on relatively steep slopes at various points throughout the area, and the effects of development could promote instability. Investigation of subsurface conditions should be undertaken in these areas. The major part of this work could be performed by using a back-hoe and digging to a depth of about 4 m. Depending on the results of this work it might be necessary to auger a few holes to deeper levels. In addition to examining the material making up the Tertiary sequence and its moisture content, it should also determine whether Triassic rocks underlie part of the suspect areas. There is much less chance of instability in areas underlain by these rocks if they occur at shallow depth.

The areas that should be investigated are shown in Figure 1. The boundaries are only approximate.

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2/10

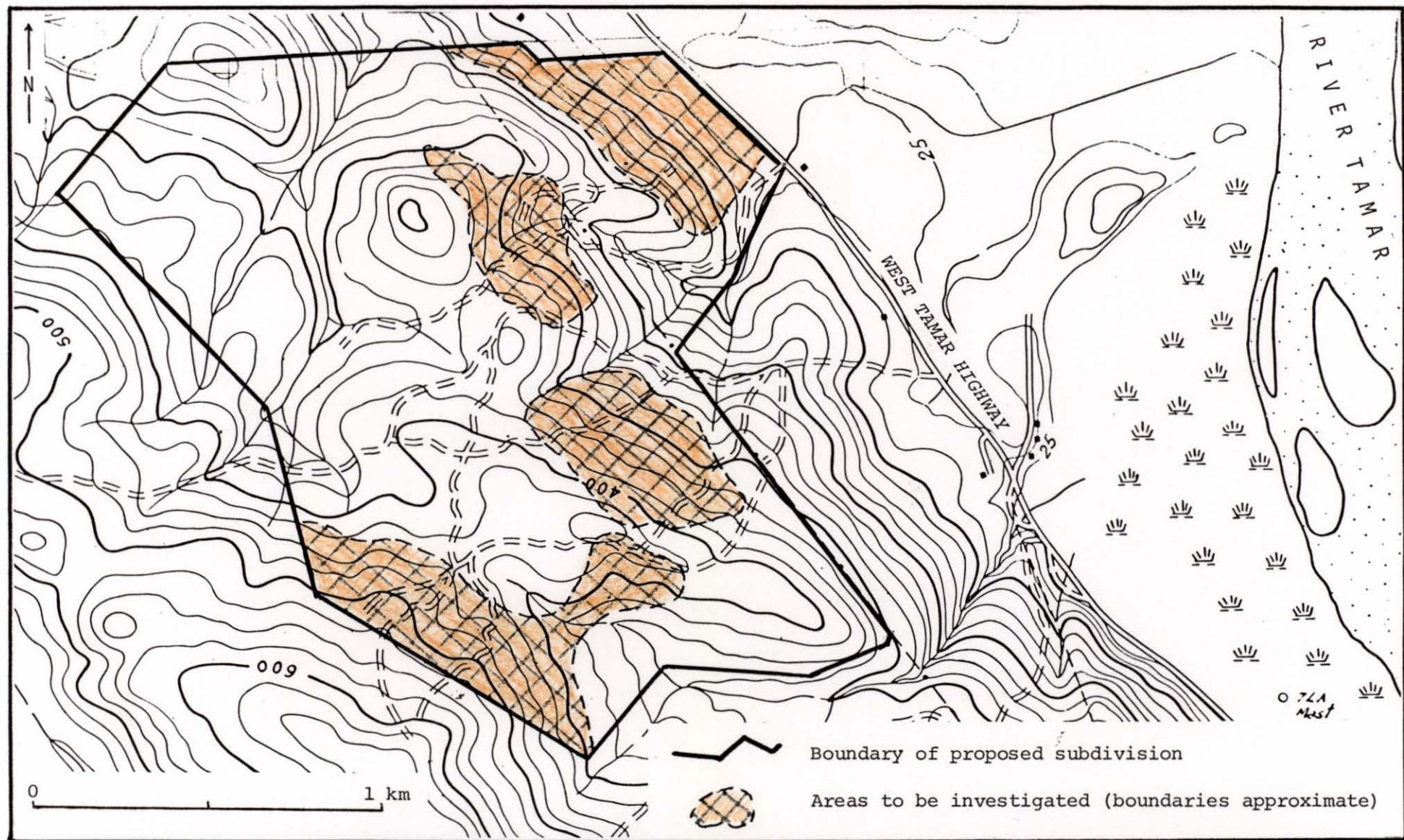


Figure 1. Proposed subdivision, Danbury Heights.

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