

A STUDY OF THE LANDSLIDES AND THEIR RELATION TO ENGINEERING AND PLANNING IN THE SOUTHERN DISTRICTS OF THE NARRACAN SHIRE, VICTORIA

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Title page: Oblique aerial view of numerous landslides along the valley of Watkins Creek

ABSTRACT

Landslides of the slump-earth flow type are common in areas of strongly undulating terrain in the Strzelecki Ranges south of Trafalgar. Failures occur each winter following heavy rain which triggers movement in the clay rich residual soil slopes.

The Shire of Narracan has a major problem in maintaining roads which are damaged each year by landslides, and some landowners are troubled by landslide damage to their pasture, fences and dams. The current trend towards subdividing farm land into small hobby farms also poses serious problems when subdivision is planned in landslide-prone areas.

This study examines the nature and distribution of landslides, the properties of the soils involved and the factors responsible for slope instability. Detailed studies have been made of the clay mineralogy, soil lithology and classification properties, and the history of land use in the area. Suggestions are made for mitigating the existing and potential landslide hazards.

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