

The landslip potential of the South Esk river bank near Perth.

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Mr. G.A. Shaw M.L.C. requested an examination of his house block and two adjacent blocks at Perth. An examination was made on 7 March 1973.

The river bank, about 300 m upstream from Perth Bridge, is about 12 m high and rises from normal water level to the flat terrace on which Perth stands. The bank is partly cleared but otherwise covered in gorse scrub; it slopes at angles up to about 25°.

Where cleared the soil is seen to be very sandy and contains some quartz and sandstone pebbles. Basalt crops out at the foot of the slope to about 4 m above river level. No clay is to be seen except where the basalt has been weathered.

The regional mapping of the area (Blake, 1959) and later revisions (Matthews pers. comm.) indicate that the terrace is of gravel and sand overlying basalt and that the clays known to cause landslips in the Tamar region are not present at this level.

No surface signs of landslip were visible although numerous small pits have been excavated, probably to win small quantities of sand or loam. There was no sign of springs of water, a necessary ingredient of landslipping. Some slight surface rainwashing of the light sandy soil had carried it down-slope.

It therefore appears that:

- (1) The deposits in the area are of a type not known to cause landslipping.
- (2) No springs are to be seen.
- (3) No evidence of previous movement is visible.

It is concluded that there is no undue risk of slipping. Any building erected on the slope should be provided with foundations suitable for sandy material. Trees and grass should be planted to discourage the rainwash erosion of the sandy soil.

REFERENCE

BLAKE, F. 1959. Geological atlas 1 mile series. Zone 7 Sheet 47. Longford. Department of Mines, Tasmania.

[12 March 1973]