

UR1972-21

An examination of stability at Norwood Avenue, Launceston.

C.J. Knights

Following an enquiry of 20 September 1972 by Link Enterprises Pty. Ltd. of Launceston, the subdivision was examined by Supervising Geologist P.C. Stevenson on 25 September 1972 and the writer on 2nd October 1972.

On the latter date four trial pits were dug by backhoe at the location indicated in the sketch plan (fig. 1).

The subdivision consists of a flat area near the road, a re-entrant, with steep banks and a shallower part below. The whole area is part of a ridge which previous mapping has indicated as needing very careful development.

From surface observations and a trial pit, the bank consists of stiff clay with hard ironstone bands; the ironstone is thought to aid stability. At the foot of the bank two trial pits showed damp clay with sand at about 3 m. The thickness of this sand bed is not known.

The bank of clay and ironstone is considerably steeper than the minimum angle for landslides in the clay of the Tamar Valley. In addition re-entrants are known to be subject to landslips, however from surface observation the bank appears to be well drained and there are no signs of deep movement.

Below the bank, trial pits indicate that the clay is damp but firm and that within depth reached by the pits, the sand does not contain free water.

From the regional aspect, other parts of the ridge have steep cuttings which appear to be stable, although there are signs of superficial movement in nearby paddocks.

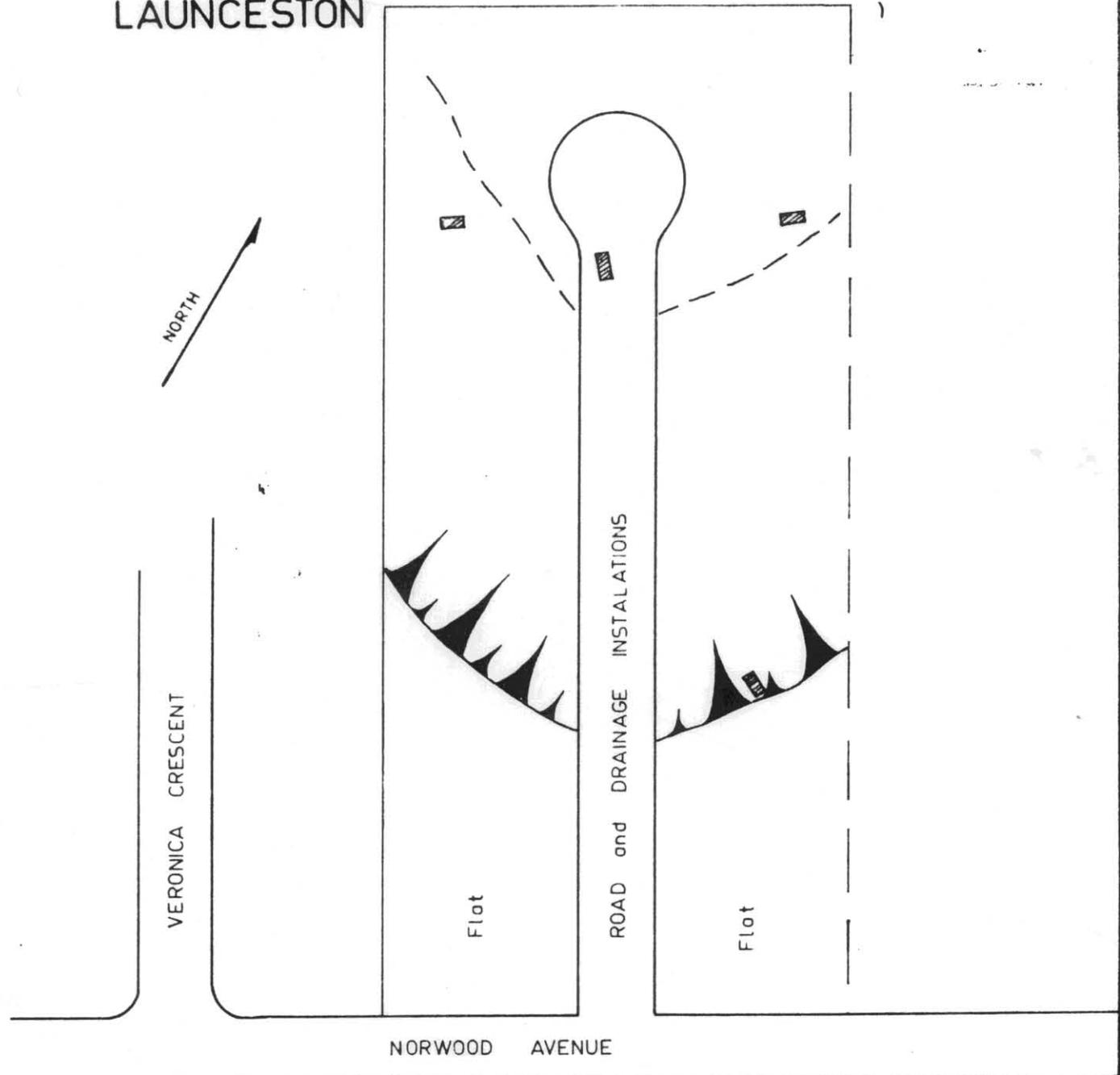
The plans for draining the subdivision should improve the present stability of the area and providing the area is well drained, we consider the risk of landslide to be slight.

The following recommendations are made:

- (1) All domestic and storm water drainage to be piped into the main drainage system.
- (2) Use of flexible or jointed pipes to ensure against leakage in tension.
- (3) Any water seepages which are discovered during development to be drained.
- (4) Unsupported cuts deeper than one metre to be avoided.
- (5) Trees should be retained or planted so as to produce a cover of at least several trees within each block and such a cover should be maintained.
- (6) Concrete slab or pillar and beam foundations are desirable in the sloping clay parts of the subdivision.

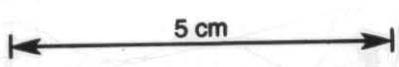
[4 October 1972]

SKETCH MAP TO SHOW LOCATION OF TEST PITS, NORWOOD AVENUE LAUNCESTON



Drawn October 1972
Department of Mines

Geologist : C. KNIGHTS



3671 - 39

Figure 1.