

Stability of land at 1 Sorell Street, George Town.

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A request was made by Mrs Gaetani for an examination of the geological stability of 1 Sorell Street, George Town.

The geological succession in this area is as follows:

*Probable
thickness
(ft)*

$\frac{1}{2}$ - 1	Humus soil.
10 - 13	Silty talus with minor clay.
>13	Weathered basalt.

The basalt is weathered and well jointed. Along the shore a little seepage water could be seen locally, but there were no indications of any movements. This type of soil is not known to be liable to sliding when the dip is moderate. The ground dips approximately 5 feet from the horizontal where the house is situated.

Two manholes serving the sewage line were inspected. No cracks or other signs of disturbance indicating soil movements were discovered. One of the manholes is located within 35 feet from the house. Concrete walls around the house and along the drive-way displayed a few cracks, but in no case had horizontal or vertical separation taken place. The fence line was straight with the exception of one fence-post which was rotten.

The strain is mainly horizontal where associated with sliding in the Tamar Valley area, and when the houses move more vertical or diagonal cracks appear than horizontal cracks. The cracks are usually situated on the walls running perpendicular to the movement. Also typical of sliding in this area is the cracking and opening up of concrete walls and other structures. None of these features were clearly developed at 1 Sorell Street. The vertical strain in fact appeared to equal or exceed the horizontal strain. No separation was evident between the front concrete pavement and the wall which could be strongly expected if there was a movement towards the river.

CONCLUSION

On the basis of these observations there is no indication that the house is sliding. The cracking of the house is not characteristic of the slide type seen in the Tamar Valley area.

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