

TR3-121

Supplementary Report on Proposed Bridge Site, Whirlpool Reach, Tamar River

DRILLING RESULTS

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Reference

Hughes, T. D., 1958—Proposed Bridge over Tamar River at Whirlpool Reach, Tas. Dept. Mines Tech. Reports No. 2 (1957), pp. 111-113.

1. Western Side

Four holes were drilled, three fairly close together near the river bank and one across the road. In all these the dolerite was rather weathered for the first ten to twenty feet, but below this the rock was hard and compact with no major gaps along joint planes. The depths of the holes were:—No. 1, 100 feet; No. 2, 78 feet; No. 3, 71 feet; No. 4, 41 feet.

2. Eastern Side

Three holes were put down in this side. The first on the eastern bank at the proposed site went through nearly 200 feet of Tertiary clays. The first six feet were surface soil and boulders, followed by 30 feet of Recent alluvium and slip material. Below this to 200 feet were compacted Tertiary clays with some carbonaceous matter.

The second hole was situated not far from the first and to the north of the proposed bridge line. Dolerite boulders, clay and sand were encountered to 17 feet and below this to the bottom of the hole (52 feet), Tertiary clay.

The third hole was farther to the north, opposite Whirlpool Rock and apparently near the edge of the basalt flow. Details of this hole are:—

- 0 ft.—6 ft., no core.
- 6 ft.—12 ft., fairly fresh basalt, good core.
- 12 ft.—20 ft., very weathered basalt, broken pieces of core.
- 20 ft.—21 ft., Tertiary sand, little core.
- 21 ft.—30 ft., very weathered basalt, little core.
- 30 ft.—50 ft., one foot of fresh basalt, then becoming more weathered.

The results of this boring show that while the foundations are excellent on the western side, those on the eastern side, consisting of Recent slip material on Tertiary clay, are most dangerous. The edges of the basalt flow are some distance to the north and south (the latter not proved by boring) of the proposed site.