

1976/48. Diamond drilling at Macquarie Point sewerage treatment plant.

W.C. Cromer

The Hobart City Council intends to extend the Macquarie Point sewerage treatment plant to provide secondary treatment. Scott and Furphy Pty Ltd, consulting engineers to the council, engaged the Department of Mines to conduct a diamond drilling programme to investigate foundation conditions at the site [EN277524]. The original foreshore has been obscured by fill, and the main object of the programme was to establish the depth to bedrock.

Of the intended 16 holes, all but two were drilled. Holes 5 and 13 were omitted because of their proximity to underground power cables. In all cases the bedrock was Jurassic dolerite. The positions of the holes are shown on the consulting engineers' plan 7029-6.

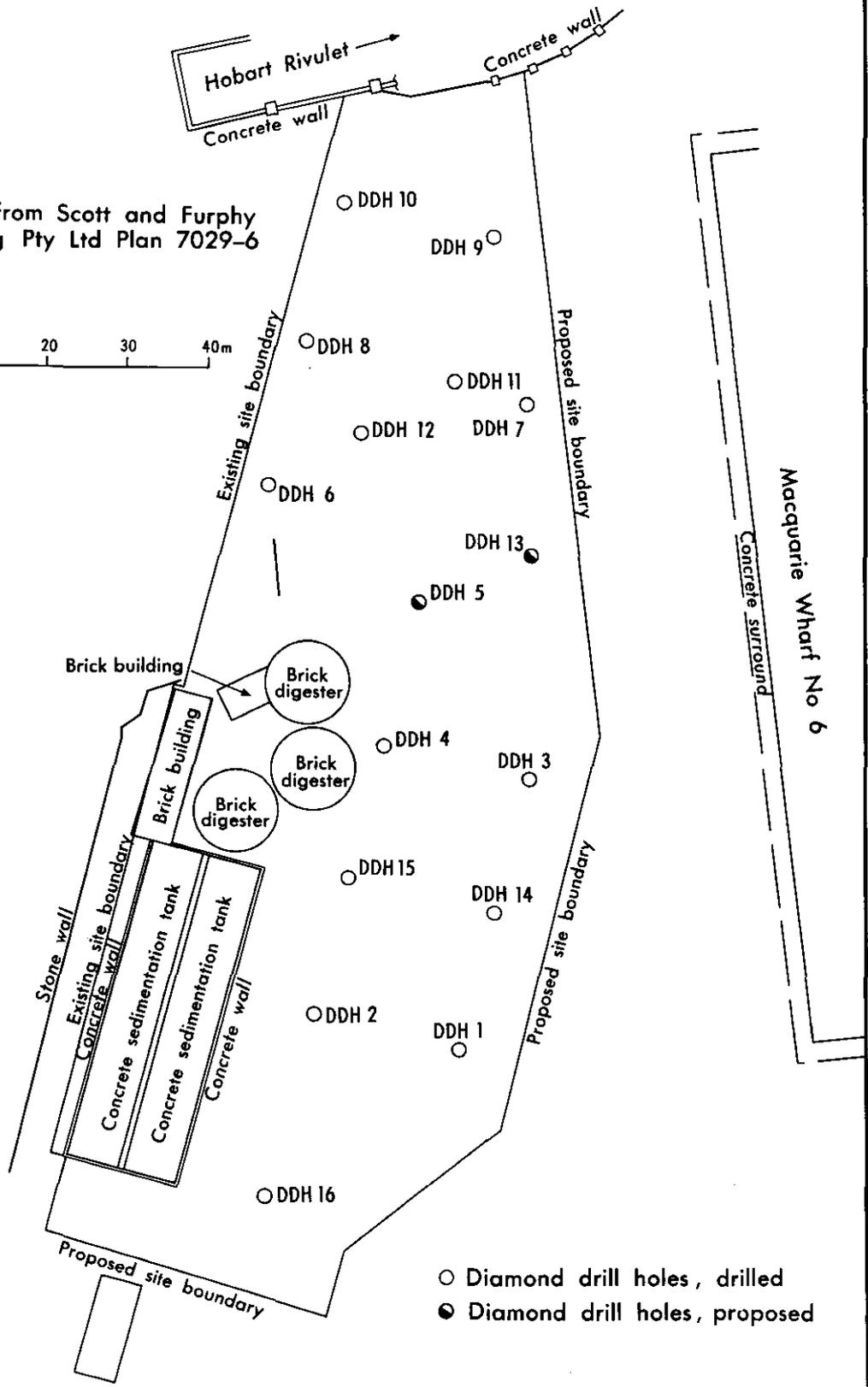
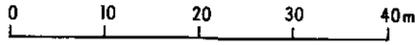
LOGS OF HOLES

Hole No.	R.L. (m)	Depth (m)	Approximate recovery (%)	Description
1	3.2	0-6.20	20	Recent fill, mainly mudstone, quartzite, sandstone, timber above 3 m, and dolerite boulders in interval 3-6.2 m.
		6.20-9.63	100	Bedrock. Hard, unweathered medium-grained dolerite. Rare sub-vertical fractures.
2	2.5	0-4.00	30	Recent fill, mainly dolerite and mudstone, and concrete.
		4.00-7.17	100	Bedrock. Generally massive unweathered fine-medium-grained dolerite. Rare sub-vertical fractures.
3	3.1	0-5.40	70	Recent fill. Above 1 m, mainly indurated mudstone, quartzite and dolerite. Below 1 m, medium-coarse-grained dolerite boulders.
		5.40-8.32	100	Bedrock. Hard, unweathered medium-grained dolerite. Rare sub-vertical fractures.
4	2.5	0-3.95	50	Recent fill. Hard unweathered boulders of medium-fine-grained dolerite.
		3.95-6.15	100	Bedrock. Hard, moderately unweathered but strongly and irregularly fractured fine-medium-grained dolerite.
6	2.5	0-1.97	10	Recent fill. Grey indurated mudstone, and dolerite.
		1.97-4.84	90	Bedrock. Relatively unweathered but strongly fractured and fragmented fine-medium-grained dolerite. Sub-vertical joints common below 4.3 m.
7	2.7	0-2.00	40	Recent fill. Mainly dolerite, quartzite, concrete and indurated mudstone.

DIAMOND DRILLING AT MACQUARIE POINT SEWERAGE TREATMENT PLANT

W.C.CROMER 1976

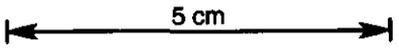
Simplified from Scott and Furphy Engineering Pty Ltd Plan 7029-6



○ Diamond drill holes, drilled
 ● Diamond drill holes, proposed

TASMANIA DEPARTMENT OF MINES

Figure 1.



<i>Hole No.</i>	<i>R.L. (m)</i>	<i>Depth (m)</i>	<i>Approximate recovery (%)</i>	<i>Description</i>
7		2.00-7.60	50	Recent fill. Fractured, unweathered medium-coarse-grained dolerite.
		7.60-9.37	80	Bedrock. Strongly fractured and fragmented relatively unweathered medium-grained dolerite.
		9.37-12.12	100	Hard, massive unweathered medium-grained dolerite.
8	2.5	0-2.68	50	Recent fill. Mainly medium-coarse-grained dolerite, and concrete.
		2.68-5.53	100	Bedrock, Hard, relatively unweathered, massive, medium-grained dolerite.
9	2.5	0-7.00	40	Recent fill. Mainly unweathered medium-grained dolerite, with minor sandstone.
		7.00-11.57	90	Bedrock. Strongly fractured and fragmented dolerite between 7.00-7.20 m. Below 7.20 m, generally massive, and unjointed medium-coarse-grained dolerite. Rare sub-vertical fractures.
10	2.3	0-1.92	50	Recent fill, mainly medium-grained dolerite boulders and brick fragments.
		1.92-2.50	100	Bedrock. Relatively unweathered moderately jointed medium-grained dolerite. Fractures sub-vertical.
11	2.3	0-6.00	60	Recent fill, comprised entirely of fractured, medium-coarse-grained dolerite boulders.
		6.00-8.30	100	Bedrock. Hard, relatively unjointed medium-grained dolerite. Fractures sub-vertical.
12	2.5	0-3.00	30	Recent fill. Mainly dolerite, and indurated mudstone.
		3.00-5.25	90	Bedrock. Strongly fractured and fragmented, moderately weathered fine-medium-grained dolerite. Irregularly fractured.
14	3.1	0-6.00	30	Recent fill. Mainly dolerite boulders.
		6.00-9.17	90	Bedrock. Generally massive medium-grained dolerite.
15	2.4	0-2.42	40	Recent fill. Mainly coarse-grained dolerite.
		2.42-3.00	90	Bedrock(?) Medium-coarse-grained dolerite.
		3.00-4.82	90	Bedrock. Relatively unweathered, hard, fine-medium-grained dolerite. Fractures sub-vertical.

<i>Hole No.</i>	<i>R.L. (m)</i>	<i>Depth (m)</i>	<i>Approximate recovery (%)</i>	<i>Description</i>
16	3.4	0-7.00	30	Recent fill. Mixture of dolerite, sandy gravel, timber, and furnace slag.
		7.00-8.90	100	Bedrock. Finely fractured fine-medium-grained dolerite. Sub-vertical joints common.
		8.90-10.60	100	Hard massive fine-medium-grained dolerite.

[11 August 1976]