## EXCAVATORS

Seven drag-line excavators have been in operation by the Department in the area throughout the year on stop-bank and canal construction and on river channel improvement and arterial drain cleaning and reformation. For these machines a high standard of maintenance has been provided by the Kerepeehi Works Depot during the year, but with depletion of stocks of essential spare parts difficulty is now being experienced in keeping these machines constantly in repair.

Details of work, including chainage and yardage, is as follows:-

No. 15 Bucyrus (<sup>3</sup>/<sub>4</sub> Yard) Excavator.—This excavator has been employed during the year clearing Poa aquatica from the Piako River and Puhunga Canal. One hundred and twelve chains of river were completed and a total of 19,650 cubic yards removed, at a cost of 1s. 5·4d, per cubic yard. This work is wholly financed by the Soil Conservation and Rivers Control Council.

Endeavours are being made to obtain an improved type of bucket for this work; also trials will shortly be earried out with tractor and V grader operated on prepared berms in an endeavour to reduce maintenance costs.

- No. 16 Bucyrus ( $\frac{3}{4}$  Yard) Ercavator.—This machine was engaged on raising  $90\frac{1}{2}$  chains of stop-banks on the east side of the Piako River for the Hauraki United Drainage Board, for whom the work was done on a 3:1 subsidy. Work was completed in October, 1949, but on request to the Hon. the Minister that a further 40 chains of stop-bank be raised on 3:1 subsidy basis, it was granted by the Soil Conservation and Rivers Control Council. Total length of stop-bank raised,  $130\frac{1}{2}$  chains, with 23,110 cubic yards of spoil, at a cost of 1s. 1d. per cubic yard.
- No. 29 Bay City ( $\frac{3}{8}$  Yard) Excavator.—This machine carried out 344 chains of drain-improvement work and 27 chains of the southern extension of the Pouarua Canal. Total excavation, 19,027 cubic yards, at a cost of 1s. 11·8d. per cubic yard.
- No. 31 R.B. 17 ( $\frac{1}{2}$  Yard) Excavator.—Following the annual overhaul to this machine in April, 1949, it commenced improving 107 chains of Torehape Road Drain. Nine hundred and forty-eight cubic yards of shingle excavated from 20 chains of this drain was loaded on to trucks and used for metalling Torehape Road.

In August the excavator was moved to the Maukoro Canal, west side, near Torehape, and work was commenced on improving 46 chains of canal.

In January, 1950, following repairs, the machine completed 40 chains of excavation on the Maukoro Canal Extension. The object of this channel is eventually to divert the Waikoura Stream into the Maukoro Canal, thus relieving the overtaxed Ngarua Canal and providing a much more direct discharge to the sea. Output of this machine during the year was 24,188 cubic yards, at a cost of 10·3d. per cubic yard.

No. 34 R.B. 10 ( $\frac{3}{8}$  Yard) Excavator.—In May this excavator commenced widening and deepening Kaihere Road Drain, south side, for a distance of  $20\frac{1}{2}$  chains. In June the machine was moved to Outlet Drain, Sections 35/36, Kerepeehi Block, when  $65\frac{1}{2}$  chains of drain was completed. In September and October, 24 chains of drain, Sections 34/35, Kerepeehi Block, was completed, also 43 chains of Central Outlet Drain improved.

In November the excavator was moved to the Waikoura Outlet, where it cleaned 58 chains. In February it cleaned the Central Road Drain for a distance of 64 chains. Total excavation for year was 18,589 cubic yards, at a cost of 1s. 8d. per cubic yard.