

## REPORT

SINCE the last report was published this Department's Chief Drainage Engineer has retired, and by arrangement the field and engineering duties carried out by him in the past are now discharged by the Ministry of Works, which has supplied the information on which this report is based.

### KAITAIA DRAINAGE AREA (61,430 ACRES), MANGONUI COUNTY

Exceptionally heavy rain during May and June seriously delayed drain-maintenance work in this district, but it was nevertheless possible to complete the annual maintenance work by the end of July.

Approximately 180 chains of Puckey's Outfall Drain was enlarged by drag-line excavator, and subsequent heavy rains proved this work to be most successful. Additional work carried out by drag-line excavator included the formation of 100 chains of stop-bank to bridge a gap in the stop-banks along the Awanui River and afford protection to a portion of the Kumi Development Block. The regrading and widening of some 180 chains of the Waipapakauri Outfall Drain was also completed. This work was very necessary, as in some places the waterway had almost completely collapsed.

Drains widened and deepened by manual labour during the year included portions of Reid's Eastern, Matthew's Outfall, Hoddle's, and Abbot's Drains. Some 50 chains of silt deposited from the newly formed Kaitaia Golf-links was also cleared from Lewis' and adjoining drains on Crown land.

Subsidence of the peat land has created additional drainage problems in this district and an investigational survey of the swamp areas is proceeding as rapidly as the staff available for this work will permit. This engineering investigation is in the nature of an overhaul of the existing drainage and is aimed at determining what remedial measures are required and also what is necessary to alleviate flooding in Kaitaia Township. The possibilities of draining marginal lands will also be investigated.

*Expenditure and Rates.*—Maintenance expenditure charged against the Rate Account for the year amounted to £2,283.

Rates struck: Special, £2,751; general, £2,242.

Rates collected, including arrears: Special, £2,120; general, £2,248.

Rebates (33 $\frac{1}{3}$  per cent.) allowed on special rates on account of prompt payment amounted to £624.

Figures for Maori rating are included and are shown as follows: Maori rates struck were £324. Payments of Maori rates amounted to £233 and the rebates allowed total £54.

### HIKURANGI DRAINAGE AREA (50,000 ACRES), WHANGAREI COUNTY

No work was carried out in this area.

### WAIHI DRAINAGE AREA (50,000 ACRES), TAURANGA COUNTY

No further construction work was carried out during the year in the two pumping areas comprising part of the Wharere Block. The older area known as the Northern Pumping Area has been settled for some time and the ground in the most part has finished consolidation. It is considered that an additional pump is now required to maintain adequate drainage. In 1948-49 a new pumping area was put into operation with the installation of one 5,000-gallon-per-minute pump. This pump is only sufficient for the initial stage, and the station has been designed to accommodate a second pump as it becomes necessary to include a larger acreage in the pumping area. Plans are being prepared and estimates have already been prepared to place these additional pumps in both the old and new areas.