

STRUCTURAL WORK.

Three small hardwood bridges, each 20 ft. span, on pile abutments were constructed on the Awaiti Canal Road. Three 4-ft.-diameter flood-gates were installed at Netherton, and a large two-barrel concrete culvert with sluice-gates constructed on the Kerepeehi Block. A large goods-shed has been moved from Patetonga to Kerepeehi, where it is being used for the storage of plant and machinery. A number of temporary dams and some temporary bridges have been required in the process of canal-construction.

SURVEYS.

Engineering and hydrographic surveys carried out during the year required 656 chains of theodolite traverse, 1,506 chains of levels, 758 chains of magnetic traverse, and 330 cross sections of the channel of the Piako River. A continuous record of river stage at several control points has been kept throughout the winter months.

SUMMARY.

The total length of the subsidiary drains constructed in connection with the Hauraki Plains scheme to date is 741 miles 75 chains. The principal works carried out during the year under review are summarized in the following schedule:—

	Length. Miles ch.	Excavation. Cub. yd.
Drains cleaned by manual labour	89 58	..
Drains widened and deepened by manual labour	6 14	10,013
Drains, new construction by manual labour	10 49	33,599
Total quantity of drainage excavation by manual labour .. .. .	..	43,612
New canals constructed by machines	1 5	23,875
River and canal improvement, machine construction	13 48	337,477
Drain and canal improvement, machine construction	6 32	29,259
Total quantity excavated by machines .. .. .	..	390,611
Stop-banks constructed or partially constructed in connection with river-improvement and canal-construction	2 52	
Roads metalled	2 71	2,339
Roads metalled, top course only	5 42	2,593
Roads resurfaced with metal or gravel	2 56	643
Total quantity of road-metal laid .. .. .	..	5,575
Roads reconstructed and improved	2 40	
New roads formed	3 5	
Clay carted for ballasting peat roads and haunching metal .. .. .	..	1,633
Fences erected	2 5	
Levels taken for road and drainage work	48 35	
Traverses for road and drainage work	24 23	
Area cleared of scrub .. .. .	..	344
Area cleared of blackberry .. .. .	..	385
Area ploughed, disked, rolled, and harrowed .. .. .	..	232
Area sown in grass .. .. .	..	57
Bridges—		Number.
Road bridges, 20 ft. span, pile abutments .. .. .	..	3
Reinforced concrete culverts, two 4 ft. by 4 ft. barrels .. .. .	..	1
Concrete flood-gates, 4 ft. diameter .. .. .	..	3
Cross-sections of Piako River and canals .. .. .	..	791

FLAX LEASES.

Some 6 areas, totalling 2,474 acres, are leased for flax-growing purposes. Annual rental amounts to £336, and £117 10s. 8d. was collected.

GRAZING-AREAS.

The area leased for grazing purposes under temporary tenancies is 6,770 acres, let in fifty-seven holdings. Annual rental totals £511 7s., and £349 19s. 4d. was actually collected.

WORKS EXPENDITURE.

The total expenditure recorded totalled £25,488 15s. 2d., of which day labour accounted for £13,284 18s. 1d. Drainage rates struck totalled £2,314 1s. 1d., and £2,745 2s. 11d. was collected.

GENERAL.

The staff, as usual, has rendered loyal and efficient assistance.

I have, &c.,

R. G. MACMORRAN, Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington.