

APPENDIX III.—LAND-DRAINAGE AND LAND-DEVELOPMENT OPERATIONS.

(R. G. MACMORRAN, Chief Drainage Engineer.)

In accordance with statutory requirements, separate reports deal with (1) Hauraki Plains, (2) Rangitaiki, and (3) Swamp Land Drainage Districts—viz., Kaitaia, Hikurangi, Waihi, and Poukawa Drainage Works.

Our work on other than the above areas has been comprised mainly in land-development operations under the small-farms scheme.

Mangatete Farm Settlement (1,270 acres).—Situated near Kaingaroa, subdivided into nine small-farm holdings. The land is clay on a limestone formation and was formerly covered with bush. Work was commenced on this block in May, 1934, when a camp to house forty relief men was erected. For the following four months from ten to fifteen men were engaged, but thereafter the employment of Maoris was sanctioned, and from thirty to forty men were employed for the balance of the year.

The block was subdivided into nine sections, varying in area from 102 acres to 178 acres. Two of the sections are in standing bush and the remainder was mostly in indifferent pasture at the time of taking over. The first work undertaken was to ring-fence, clean up, and top-dress a portion of five sections of open country, and settlers were placed on these sections in August and provided with herds, which have been milked throughout the season.

The principal works carried out have been clearing and logging-up, fencing, top-dressing and cultivating, and erection of buildings on the five occupied sections. All these are now provided with houses and cow-sheds and are sufficiently developed to enable the settlers to carry on with a little further assistance. Houses and cow-sheds are in course of erection on two other sections which are being fenced and cleared of fern, logs, &c., and will shortly be ready for occupation. Other work carried out consisted of splitting posts, felling, cross-cutting, and milling timber used for cow-sheds, bridges, and gates on this and the Kaitaia Swamp Area.

Additional work required in this area is erection of houses, bush-falling, fencing, and grassing on the two sections not yet dealt with, further clearing up and fencing on the sections in hand, and construction of access road between the Mangatete and Puriri Blocks.

Principal works carried out to date comprise 50,000 superficial feet timber felled and cross-cut, 6,600 posts and 1,300 battens split, 210 strainers squared, 4 miles 54 chains fencing erected, 150 acres cleared, 160 acres top-dressed, three cottages erected, two renovated, and three milking-sheds built.

Kaitaia Small Farms (1,000 acres).—This swamp comprises 1,000 acres of Crown land on left bank of Awani River, near Kaitaia. Labour was supplied by Unemployment Board, and an average of fifty men were employed and housed in a camp erected in the centre of the block. The land was originally covered with rushes, nigger-heads, raupo, and manuka, with a few patches of bush along the river-bank.

The principal works carried out comprised drain-excavation, clearing, stumping and preparation of ground for grassing, roadmaking, and fencing. Erection of six houses and cow-sheds was commenced in March and will be completed during April. The six sections on which buildings are being erected could then be occupied, as they are sufficiently improved to carry a few dairy-cows for milking next season.

Drainage-work has absorbed the greater part of the labour employed this year, but main outlets are now practically completed and further drains required consist mainly of small boundary and subdivisional outlets.

Roading is sufficiently advanced to give access to six sections during dry weather, but the access road will be practically impassable for some months of the year until it is metalled, and this work, together with further formation, will require to be carried out in the coming year.

Clearing and grassing has been completed on the whole of the river-frontage. About 200 acres is now sown, comprising all the alluvial and solid country, the balance of the block being peat land of poorer quality and more difficult to establish in good pasture. A hundred acres was sown last autumn in good grasses, which are apparently now well established and likely to provide first-class permanent pasture.

One hundred and forty-eight head of yearling heifers and seven bulls were placed on the area last July. Three of the heifers died during the year from unknown causes, but the remainder have done well and maintained good condition, and further stock can be carried next year.

The principal works carried out during the year comprised 4 miles 65 chains drains constructed, 4 miles 5 chains drains deepened and widened, 20 chains stop-bank erected, 61 chains road-bank formed, five bridges and three culverts built, 200 chains fences erected, 128 acres cleared, 168 acres sown in grass, and 3,000 trees planted.

Small-farm Areas, Hauraki Plains.—On two small farms at Mangatarata some 56 acres previously ploughed and cultivated were sown with grass-seed and fertilizer. Two cottages of four rooms were built, also two four-bail milking-sheds, farm-access bridge of 30 ft. span, 255 chains fencing erected, and water-supply provided for each farm.

On an area at Kaihere a cottage was removed from Kerepechi, enlarged, and re-erected. One four-bail milking-shed, 108 chains fencing, and one 24 ft. span access bridge were also erected, and water-supply provided.