

Waikare Swamps, and many others too numerous to mention. Works done by local bodies out of grants and subsidies for river, drainage, and road works have been inspected, plans and specifications for such works having previously been examined and approved. Vouchers totalling £2,216 3s. 3d. were passed for payment to the various local authorities.

Hereunder is a short report on works that have been carried out under the direction of the branch :—

*Awaiti-Netherton Road (Metalling).*—To date 49 chains have been completed, the metal being delivered from the Spit by scow and carted from Netherton on to the road. Good work has been done. Expenditure was £648 1s. 10d.

*Awaiti Block (Outfall for).*—This work consisted of widening and deepening the outfall on the area outside Hauraki Plains area. Only maintenance will be necessary in future. Expenditure was £218 8s. 7d.

*Lake St. George Outfall, Southland.*—Investigations and engineering surveys were carried out with a view to providing adequate drainage of swamp lands adjacent to this lake. The work was not commenced until January, owing to shortage of engineering staff. Some 9 miles of levels were taken and 7 miles of traverses run. It was decided finally to advocate the improvement of the old channel. Cost of work to date was £88 17s. 3d.

*Hauraki Plains (Metalling Roads in).*—This work has been fully reported on in main Hauraki Plains report. A considerable amount of plant has been procured during the year, including two tractors, and this should facilitate and cheapen the work in future. Some 4 miles 18 chains of metalling has been done and 21 chains gravelled. Expenditure was £8,388 0s. 2d.

*Hauraki Plains (Maintenance of Completed Works, Drains, &c.).*—This is a rapidly increasing item, some 205 miles of drains having been cleaned during the period, and next year there will be an extra 80 miles of drains to maintain. In addition repairs to stop-banks have been executed. Expenditure was £4,797 15s. 5d.

*Hauraki Plains (Construction of Roads and Drains on Crown Lands adjoining).*—The work done was principally the construction of Puketotara deviation road, and also for roads in Waitakaruru Loan Block. Expenditure was £686 2s.

*Hauraki Plains (Part Cost Formation Road from Waikaka to Piako River to give Access to Crown Settlers outside Hauraki Plains).*—The work done consisted of the relaying and ballasting of the Patetonga tram-line, leading from Piako River to Patetonga Township, some 140 chains having been done. Expenditure was £671 3s. 10d.

*Hauraki Plains (Orchard East Road Extension).*—The formation of this road was completed during the year, a total distance of 1 mile 61 chains. Expenditure was £211 10s.

*Kopu Ferry Road (Formation and Metalling).*—This road was completed during the year, a distance of 1 mile 20 chains. Expenditure was £273 8s.

*Lees Valley.*—Our undertaking was to construct main outfalls but not to go in for intensive drainage. Excellent results are following our operations, and stock are now all over the drained country, fully proving the necessity of the work. All the work contemplated should be completed within a few weeks. Some 7 miles 53 chains of main drains have been completed during the year, leaving 10 chains more to complete. The total length of drains now in operation is 11 miles 33 chains. In addition for fifteen diversions of Duck Creek have been made, totalling 96 chains. Great improvement has resulted through this straightening of Duck Creek, reducing flooding to a minimum. Total amount of excavation of all descriptions for the year was 43,209 cubic yards, through peat, clay, and shingle. Some eight ford-crossings through drains were also made. The expenditure for the year under all headings amounted to £4,103 16s. 3d.

*Matata Water-supply.*—This scheme has been carried out, and the service is now ready for use, with the exception of a line of pipes to the far Maori pa, which has yet to be laid. A line of wooden piping was laid from the post-office at the corner of Clarke and Arawa Streets, along Arawa Street, and St. John's Street, thence along Pollen Street and through Section 1 to the Waitepuru Stream, and so along the course of the stream for some 40 chains to the dam-site and intake. Owing to the liability of this stream to rise very suddenly considerable work had to be done up the gorge in making a definite channel in which to confine the stream. A good job was made of this; also of the dam, which is a very solid piece of work. Branch lines were run down Pakeha Street to the corner of Mair Street, and down Wilson Street and Mair Street to the corner of Heale Street. Two branches were also run out on the eastern side of Pollen Street, one to the first Maori pa and the other to a collection of Maori whares. Patent connections were left opposite all dwellings, and connections for hydrants were left in four places. Valves were inserted in various places, so that branches may be cut off at any time, and sluice-valves also placed where necessary. Stand-pipes with taps for public use were erected at the corner of Nesbitt and Mair Streets and on each of the branches on the east side of Pollen Street. The pressure of water through these taps was most satisfactory. An area of approximately 300 acres, embracing the watershed of the Waitepuru Stream, has been surveyed and reserved with a view to protecting the brush and timber on the sides of the watershed. The expenditure on this work was £1,528 17s. 5d.

*Orongo Estate Works.*—This estate, comprising approximately 2,100 acres, was purchased from Messrs. Newsham and Blomfield for returned soldiers settlement purposes in September last. A large portion of the area is below spring-tide level, and when taken over was in a very rough and neglected condition. Six or seven hundred acres was in rough feed, a similar area was overrun with tall fescue, and the balance was covered with salt water, weed, and rushes. Reclamation work was commenced at the end of December last, and with plenty of good labour available has progressed rapidly. The main work of stop-banking round the foreshore was let in sections, and is now well on towards completion. Of the three concrete flood-gates necessary, one was completed a few days back