

and is acting splendidly; material for the remaining two is on the ground. To connect up stop-bank three small creeks were timbered and filled in, and after a little trouble with the largest all three are holding well. One large creek still remains to be dammed. Contracts were let for several internal drains and for sections of the main-road drains late in the year, although much of the country here will be too hard for economical working till the winter sets in. In all 220 chains of stop-bank in conjunction with drain construction and 90 chains of internal drains have been completed to date. Ploughing operations for the eradication of fescue, of which there is a prolific growth on a portion of the area, were commenced towards the end of January. For this purpose two tractors were procured, and are admirably suited for the work. To date an area of approximately 70 acres has been ploughed. The beneficial effect of the drainage work already effected is noticeable in that several areas which were mere bogs are with the tide water excluded fast becoming fit for the tractor and plough. Total expenditure to date is £3,175 10s. 1d.

*Opouriao Protective Works (to prevent encroachment of Whakatane and Waimana Rivers).*—During the year a great amount of willowing has been done at various points in the Opouriao district. In several instances the settlers themselves did the work, consequently greater interest has been taken and in many instances a really good job done. The groyne put in at Webster's was partly washed away, but was reconstructed. A bad bend near this groyne that was subject to washouts has been improved owing to rapid growth of willows. The expenditure during the year was £1,150 2s. 2d.

*Piako and Waitoa Rivers Improvement.*—This work comprised dredging the river and cutting off awkward bends. The expenditure was £826 15s.

*Rangitaiki Drainage District (General Road-construction).*—Work in connection with this vote has been chiefly repair work owing to damage done by floods. The crossing over the old Rangitaiki River bed was raised some 2 ft., as floods came very close to the top of the old road. During a flood the Rangitaiki East Bank Road washed out opposite Sections 58 and 55, Matata Parish, but the damage was soon repaired and the road reopened for traffic. Expenditure during the year was £183 14s. 5d.

*Rangitaiki Drainage (Bank-protection, Tarawera River, at Te Teko).*—This work mainly consisted of patching and strengthening existing works. During the year several floods were experienced, damaging stop-banks at various places. These were repaired, and other weakened spots built up. In order to prevent damage by cattle a three-wire fence was erected along a considerable length of bank, occasional openings being left in order to give cattle access to the water. In these openings the bank was built higher to allow for cattle trampling it down. Expenditure during the year was £325 8s. 5d.

*Rangitaiki Drainage District (Railway Road).*—The Main East Coast Road has been formed and thrown open for traffic from Awaitei Road to the Rangitaiki River, and a gang of labourers is now working on the formation from Awakaponga drain to Tarawera River. This portion is soft and wet, and will require a great amount of sand-filling in order to secure a solid foundation. As the Public Works Department has a ballast-train working on railway alongside, arrangements are being made for them to provide the spoil for filling. From the Rangitaiki River eastwards drains have been cut on both sides of road for a distance of 57 chains and the spoil thrown into the centre. Fencing has been completed from Tarawera River to Rangitaiki River and from western drain to Awakeri. The remainder will be done as soon as necessary material is available. Expenditure for the year was £2,512 17s. 7d.

*Seaward-Moss-Awarua Swamp.*—Engineering (field) was started towards end of period, and to date some 6 miles of traversing and 3 miles of levelling have been done. Cost of work to date is £14 1s. 11d.

*Oraka Stream, Southland.*—Some 2 miles of levels and 2 miles of traverse were run in connection with the possible diversion of the stream. It was finally decided to recommend the improvement of the existing stream owing to the great difficulty in keeping open any new mouth.

*Tokatoka No. 3 Additional Loan Block.*—These works comprise the reclaiming of some 1,625 acres (twenty-four sections) of Crown land in Block XII, Tokatoka Survey District—a portion of the Raupo Swamp—which was set aside for a returned soldiers' settlement. Operations in connection with the preparing of this area for settlement were commenced in May of last year. The drainage work was carried out on the small-contract system by men provided by the Alien Service Branch of the Labour Department. These men, principally Jugo-Slavs, are first-class spademen, and, though somewhat disturbed at being called up, soon settled down and gave excellent service in every way. This area is periodically swept by flood-water from the higher back country, and will continue to be so until the main catch-waters now under construction by the Raupo Drainage Board are completed. In all, 10 miles of new drains were constructed and 3 miles of old drains have been widened and deepened. Road operations are now in progress, and include the formation of some  $3\frac{1}{2}$  miles of new roads and  $1\frac{1}{4}$  miles of road already partially formed. This work will be completed shortly. Metal for approximately 3 miles of these roads has been landed on the river-bank, and arrangements have been made to have same delivered and spread. A start has been made with the sinking of bores to provide water for stock. Four wells have already been sunk, but the water is in places of questionable quality. This will probably improve with pumping, and experiments in this direction are now being made. It is hoped to sink one well on each section. An area of 500 acres at the northern end of the block was resubdivided to bring it into line with a practical scheme of roading. The expenditure to date has been £8,402 19s. 6d.

*Tarawera Bridge and River-bank Protection.*—Repair work has been carried out all along the Tarawera River stop-banks, necessitating in some places practically new stop-banks being erected. "Wattling" work was carried out on the west bank of Tarawera outlet, which was falling and endangering the wharf and two goods-sheds. This bank is now holding well in spite of the heavy seas which occasionally run in the outlet. Expenditure during the year was £1,025 18s. 1d.