

APPENDIX No. 2.—SURVEYS.

EXTRACTS FROM REPORTS OF CHIEF SURVEYORS ON THE SURVEY OPERATIONS FOR THE TWELVE MONTHS ENDED 31st MARCH, 1899.

AUCKLAND.

Minor Triangulation.—Practically very little work has been done which can be classed under this heading. A survey of 25,652 acres, at a cost of 1.11d. per acre, was carried out by Mr. J. B. Thomson, for the purpose of correcting certain known errors of closures in the old work in the Opuawhanga district, and by Mr. J. I. Philips breaking down major triangulation for the purpose of check upon his Rangitoto-Tuhua subdivision surveys, in the Tuhua district.

Rural and Suburban.—The output this year again shows an increase, its total being 437 sections, for an area of 116,081 acres, an increased average area per section of 242 acres, against an average of 194 acres per section in last year's return; whilst the mean cost per acre has dropped to 1.38s. per acre, against 1.58s. per acre in last year's return. The staff have contributed the major portion of the work—i.e., 97,276 acres, at a mean cost of 1.28s. per acre. Authorised surveyors at schedule rates have surveyed a total of 18,805 acres, divided amongst 122 sections, at a mean cost of nearly 2s. per acre. This class of work has been distributed amongst eighteen authorised surveyors. The total cost of the 116,081 acres was £8,014 5s. 1d. Nearly the whole of the rural sections surveyed by the staff has been in broken forest country, with the exception of some 3,000 acres of open fern land in the Puniu district, by Mr. Spencer.

Town Surveys.—Mr. H. D. M. Haszard is the only contributor of town-section work, which consists of the Village of Mamaku, on the highest point of the Rotorua railway-line, near Rotorua, where several sawmills have been established, and a few mining residence and business sites in the Ohinemuri district. The total area so surveyed is 140 acres, subdivided into 150 lots, at a mean cost of nearly 17s. an acre. The whole of the area so surveyed is in heavy forest.

Native Land Court Surveys.—The large area of 94,106 acres has been chiefly surveyed by authorised surveyors, with the exception of 2,628 acres surveyed by Mr. Baber in the Maketu and Te Tumu districts, at Tauranga. The mean cost per acre is 7.96d. The large surveys, containing 65,603 acres, in the so-called "King-country" have been chiefly done by Messrs. W. Cussen, J. I. Philips, and W. Hallett, to carry out the orders of the Native Land Court in the Rangitoto-Tuhua Block. The whole area is densely covered with forest, and is very inaccessible. During the year the subdivision surveys ordered by the Native Land Court have been exceptionally numerous, and have occupied the time of three draughtsmen to check and record them.

Gold-mining Surveys.—Only a total of 3,848 acres has been surveyed for the Warden's Court this year, at a mean cost of 3.77s. per acre. I do not anticipate any great increase in this class of survey, as the amalgamation of claims are generally being dealt with on the plans formerly furnished.

Roads, &c.—There has been a large increase in the total mileage of roads surveyed and mapped. Plans of nearly 308 miles have been lodged for record, practically the whole return being by the staff. The cost per mile was very low—a little over £10 per mile, which includes grading, and the whole length was in nearly all cases through forest country. Mr. Vickerman surveyed and explored thirty-one miles of road in the King-country at a cost of £436.

Other Work.—A sum of £1,294 10s. 8d. is ranged under this heading. In addition to this amount, £1,147 9s. 1d. is the cost of inspection of surveys and road-exploration in the King-country by Mr. L. Cussen, under whose general supervision the surveys now in progress in that district are being carried on. £34 18s. is the cost of inspection of county-road contracts by Mr. Baber and attendances at Native Land Court, &c. Mr. Vickerman returns £32 10s., being cost of reports upon Waitehuna-Whatawhata road-deviation, &c., Raglan County. The sum of £450 1s. 4d. is returned by Mr. Haszard as the cost of inspection of mining surveys and general work incurred for the benefit of the Warden's Office in the Hauraki Mining District generally, and also inspecting Native Land Court surveys near Taupo, and rural surveys, Waipu. £16 is the cost of running four miles of a Native boundary by Mr. T. K. Thomson in the Muriwhenua district. £29 8s. is the cost of timber and ranging inspections by Mr. H. A. Warner. The sum of £150 13s. 4d. is charged by Mr. J. B. Thomson for time occupied in reporting upon and estimating kauri timber on Crown grants; also reporting upon settlement work, and cost of supervising road-construction at Ruapekapeka, &c. Mr. E. P. Turner returns a cost of £32 14s. 6d. for time occupied in reporting upon proposed road-deviations, &c., by local bodies in Raglan and Manukau Counties. £68 represents the time of Mr. Wilson and his party counting and measuring kauri timber on Crown lands, and marking boundaries adjoining freeholds, to prevent encroachments. £30 is the cost of Mr. Mountfort's time for reporting upon improvements on sections for settlement purposes. £7 16s. 10d. is the cost of Mr. Laseron's time reporting upon fencing of education reserves near Whaingaroa hot springs.

Inspection of Rural Surveys.—Mr. L. Cussen has given as much time as possible to inspection of surveys in this district. Mr. Haszard, in addition to mining inspection, has inspected some