

Reproduced Plans.—The amount of £129 10s. 6d. was paid out to private surveyors for the reproduction of twenty-three plans during the year. In addition to these, twenty-two land-transfer plans to the value of £71 2s. were reproduced by the office staff. Half the value of all land-transfer plans was recovered from the Lands and Deeds Department. The number of plans reproduced by private surveyors is rapidly decreasing. Mr. Rochfort is practically the only one who is in a position to reproduce plans, but he is too busy to do this work.

The following is the total number of plans reproduced by the office staff during the year: Crown, 9; statutory, 11; land transfer, 22.

Land Transfer.—During the year 168 plans, comprising an area of 37,333 acres 1 rood 36 perches and containing 704 lots, were approved.

Statutory Plans.—Twenty-four plans were approved.

Standard Lithography.—During the year, Clive and Wakarara Survey Districts 40-chain maps have been drawn, while Heretaunga, Kidnapper, Wainarama, Oero, Te Mata, Marackakaho, and Matapiro have been revised. So far, this work has not yet been published. Tahoraite district is being drawn, leaving five districts yet to be drawn.

Record Maps.—The drawing of record maps is being pushed ahead as quickly as possible, but there still remains a great deal of this work to do. Title-record maps on various scales from 2 chains to 20 chains to 1 in. are being drawn for the Deeds Department.

Rural Standard Traverse Adjustment.—The adjustment of rural standard traverses has been brought nearer completion during the year.

The final adjusted co-ordinates, in terms of transverse Mercators projection of approximately 450 miles of standard traverse were obtained, bringing the total of adjusted work to approximately 1,300 miles.

The length of standard traverse which remains to be adjusted is approximately 100 miles, and this will be carried out as soon as the necessary field control and revision can be carried out by the staff surveyors.

TARANAKI LAND DISTRICT.

(NELSON CLAY, Chief Surveyor.)

Triangulation.—Owing to the closing error in the rural standard traverse exceeding the total of 10 links, a system of triangulation to localize the error was considered necessary.

During the year the services of Mr. W. G. Nelson were made available for this work, and a complete system of triangulation round Mount Egmont was put in hand.

Considerable difficulty was experienced in obtaining a strong scheme of triangulation, owing to the circular route around Mount Egmont and the conical nature of the country covered.

Numerous plantations and hedges through which lines of sight had to be cut further hampered the work.

To overcome these difficulties two satellite stations were used, one on the top of a rata stump 46 ft. above the ground and the other on a totara stump 15 ft. above the ground.

Towers were erected 10 ft. in height at each end of the Eltham—Okaiawa base line in order to elevate the line of sight above the intervening hedges and plantations.

Eight hundred and thirty square miles were covered by this triangulation at a cost to date of £1,337 1s. 9d., or £1.61 per square mile. A total of eight-seven triangles from forty stations were observed at an average cost of £33.43 per station. The average closure without taking spherical excess into consideration was 2.76 seconds, and the maximum closure 8.1 seconds.

In addition to the triangulation, five connections were made to the rural standard traverse involving approximately $4\frac{1}{2}$ miles of standard chaining.

In order to complete this work further observing on three stations is required, and a further six connections to the rural standard traverse involving approximately $5\frac{1}{2}$ miles of standard chaining is necessary.

Observations were to have been taken in conjunction with this work to determine, if possible, what affect Mount Egmont has in deflecting the plumb line from the vertical. This work also has still to be carried out.

Village and Suburban.—Two separate surveys are included.

Town-section Surveys.—These include eight separate surveys of fifty-four sections, five of these, comprising fifty sections, being for the Housing Department.

Roads and Railways.—Altogether, 4 miles 3 chains of roads in four separate surveys of 0.5, 0.25, 1.88, and 1.41 miles were carried out.

Native Land Court Surveys.—The total area of Native Land Court surveys completed during the year amounted to 1,272 acres, of which 351 acres were done by private surveyors under authority and 921 acres by a staff surveyor.

Native Land Court Work.—The authorities to survey issued during the year for west coast settlement and ordinary Native lands total ten, covering twenty-two subdivisions of an area of 686 acres. The total area on hand under authority by surveyors at 31st March, 1939, is 181 acres.

Of authorities issued prior to the 31st March, 1938, an area of 629 acres, covering five subdivisions, held by two authorities have been completed and plans received during the year.

The total area of Native Land Court surveys completed during the year amounts to 1,272 acres.

The number of plans endorsed (to comply with Judge's instructions) and forwarded to the Registrar, Native Land Court, for attachment to partition orders total forty-six.