

Field Inspections.—Five field inspections of private surveyors' work were completed during the year. A good standard of accuracy has been maintained, but the ground marking calls for improvement, particularly in placing the more important control traverse points in positions not likely to be disturbed. The field staff is setting an excellent example of this work, and every endeavour is being made to have the private surveyor realize the importance of such work.

Traverse closures indicate that a high standard of work has been maintained. From closures of varying distances totalling 7·52 miles covering 107 stations in undulating to hilly, mostly bush, land, disclose an error of 0·17 link per mile on the meridian and 0·44 link on the perpendicular.

For the coming year the field staffs have ample work in hand for the next twelve months. The greater part of the work shall be in defining areas for scenic purposes adjoining or close to the main south highway in South Westland. A number of road-deviation surveys will also be required by the Public Works Department, as well as applications for building-sites and Crown leaseholds in various parts of the district.

OFFICE-WORK.

Plans approved during the year numbered eighty-seven, classified as follows: Crown, 44; Land Transfer Department, 29; and other Departments, &c., 14. This is one plan less than last year. All staff surveyors' plans have been drawn from field notes by the draughting staff. Two hundred and eighteen mining applications were reported on for the Warden's Court, 108 lithographs were coloured, 1,049 general tracings were prepared; of these, 727 were for this Department and 322 for other Departments. Fifteen notices for scenic reserves were printed, 41 plans and tracings were mounted, 37 sun-prints taken, and 1 tracing for sale-plan purposes prepared. Ten new and 44 renewals of timber licenses were recorded.

Diagrams examined and passed numbered 363, and placed on instruments of title 460. One original tracing was prepared for lithographic purposes, and three original tracings revised for the reprinting of sheet 1, Grey County—the reprinting has been held over pending legalization of portions of permanent State forest areas.

In order that a uniform system of dealing with survey records as set out in Technical Circular No. 55 may be carried out, plans in the safe have been separated, renumbered consecutively, and placed in their respective drawers. This entailed a considerable amount of work, which can only be carried out at intervals with the small staff available. A considerable amount has yet to be done in compiling new index maps, registers, and amending the old plan numbers on record-sheets, &c.

With the able assistance of the Senior Draughtsman and other members of the draughting staff very good progress has been made in this work, which, together with the routine office duties, should keep the draughting staff fully engaged for the ensuing year.

CANTERBURY LAND DISTRICT.

(Mr. T. W. PRESTON, Chief Surveyor.)

FIELD-WORK.

Field Staff.—Messrs. C. L. Cox and A. D. McLaren continued their duties in this district as staff surveyors during the whole of the past year, Mr. Cox having with him Mr. C. W. Williams as survey cadet. As Mr. T. P. Gibson, survey cadet, left for England in March, 1938, Mr. McLaren commenced the year without a survey cadet, but was joined by Mr. T. E. Miles on the 1st July.

The services of eight contract surveyors have been required from time to time during the year to cope with the large amount of subdivision surveys necessitated by the activities of the Housing Department.

Precise Levelling.—This work was continued by Mr. C. L. Cox throughout the year, though much of his time was spent on other urgent surveys.

The Christchurch–Sumner–Lyttelton circuit was completed in November, 1938, the closure for the 31-mile circuit being 0·029 ft. Approximately half comprised hilly country up to 1,100 ft. in elevation.

Fifty-five miles of double levelling were completed during the year at a cost of £15·614 per mile (excluding cost of putting in bench marks).

The Christchurch–Timaru line is now completed from Christchurch to the Rakaia River. Mr. Cox reports that on the flat country on this line, on account of shimmer during the middle of the day, it is necessary to commence work at daylight and to suspend operations at midday until conditions improve in the evening, usually an hour or two before sunset. He is at present averaging over 1 mile of levelling per working-day.

Rural Surveys.—The only rural survey carried out during the year comprised an area of 1,066 acres recently acquired at Ashley Downs by the State Forest Service.

Village and Suburban Surveys.—Forty-two sections were surveyed comprising 139½ acres. Three of these sections were for the housing scheme, the balance comprised school-site, additional lands for defence, and miscellaneous surveys.

Town Surveys.—Some 76 acres of town lands were surveyed into 363 sections, 352 of these sections being for the housing scheme, five of the remaining sections were in connection with the site of the new post-office in the city, the others being at Lyttelton and South Rakaia.

Housing Surveys.—These surveys are included under the headings of "Village and Suburban" and "Town," and comprised altogether 355 sections of a total area of 105½ acres.