

OTAGO LAND DISTRICT.

(H. A. ADAMS, Chief Surveyor.)

FIELD-WORK.

The survey staff comprises three surveyors, Messrs. F. S. Little, J. C. Meale, and A. J. Houlston, and one Survey Cadet, Mr. W. S. Boyes, attached to Mr. J. C. Meale. It would be of advantage to have another Survey Cadet attached to Mr. F. S. Little for assistance with standard surveys and road deviations therewith. This appointment would relieve the surveyor of purely routine work such as plotting and calculations, and thus enable the more-important phases of field-work to be expedited. This class of work offers good experience for cadets, and should prove invaluable to them when called upon to carry out this class of survey work.

There has been ample work on hand to keep three parties fully engaged in the field. Several large run areas are under review for subdivision, and with the State-highway surveys in hand and in view, coupled with the rural standard work carried out in conjunction therewith, also housing surveys and spotting surveys in general, more than sufficient work is anticipated to keep three parties in commission in this district during the ensuing season.

The city standard survey of Anderson's Bay and Tainui, which work has been retarded owing to more urgent housing and run subdivisions, is, I am pleased to say, progressing more satisfactorily, and an early completion of the work is anticipated. Pending further authority to extend the survey to incorporate those streets in various parts of the city which have still to be standardized, the surveyor will transfer his activities to highway standard work which has been authorized, at the same time completing the Proclamation survey for the Public Works Department of the deviations concerned.

Triangulation.—Maintenance-work to the extent of £24 19s. has been performed during the year. No new work has been carried out, but with the extension of the primary triangulation over this district a considerable amount of revision of minor triangulation will be required. With the extension of roads in Western Otago further triangulation will be rendered necessary at an early date. This work will be of assistance, and can be carried out in conjunction with any topographical survey of the alpine regions when this work is undertaken.

Except for certain mountainous areas in Western Otago, the district is controlled by minor triangulation with the exception of the South Clutha basin, in the vicinity of Otanomomo. This was not done in the early days, and, although since controlled by a rural standard survey by Mr. Langmuir and Mr. Burton, an effort should be made to bridge the existing gap between Glenomaru and Kaitangata districts by directly connecting these districts by a network of large triangles. This work can be done when the rural standard work referred to is brought up to date by Mr. Little, Staff Surveyor, at an early date. The work will no doubt be required in connection with the coastal survey now being carried out by the Admiralty.

Topographical.—An area of 583 acres of contoured topography was completed by Mr. A. J. Houlston. This comprised the Town of Pembroke, and was undertaken in connection with a town-planning scheme for this locality. Several small areas for the Housing Department were contoured.

Recent explorations in Western Otago disclose that official maps of this area are in certain parts inaccurate, and a large area in Humboldt, Humboldtside, and Forbeside Survey Districts is unmapped. With improved access this locality is growing in popularity with trampers, and further topographical work is indicated.

Standard Surveys: Rural.—Field-work has been completed for a length of 18 miles between Milton and Balclutha. This was carried out in conjunction with the survey of road deviations on the main highway between these places. Field-work has been commenced on the standard traverse of the Dunedin-Waitati (via Leith Valley) Main Highway, a distance of 9.5 miles. At an early date field-work will be commenced on the Balclutha-Clinton Main Highway (20 miles) and Dunedin - Dukes Road Main Highway (7 miles). These standard traverses will be carried out in conjunction with the survey of deviations on the main highways.

Further State-highway surveys are anticipated next season—viz., on the Milton-Roxburgh and the Lindis-Cromwell State Highways—and opportunity should be taken to carry out a rural standard survey in conjunction with the Proclamation surveys of the various deviations involved.

On the completion of the Balclutha-Waiwera section, opportunity will be taken to complete the plan-work of the Otanomomo rural standards on the Lower Clutha basin and bring the work up to date by completing the circuits where required. This work should be extended through Port Molyneux to link up with the seaside resort at Kaka Point, terminating at Willsheer Bay Domain, an extension of approximately 2 miles.

Owing to obstruction by plantations, &c., the trigs. on the lower Taieri Plain are in many cases obscured, with the result that the stations are of little practical use. Consideration should be given to establishing rural standard blocks along the roads which traverse the Taieri Plains, linking up with the Dunedin - Dukes Road - Dunedin (through Green Island Borough) rural standard circuit, which is being undertaken forthwith. It will be of inestimable value when carrying out rural surveys on the plains, and the work should be undertaken at the first available opportunity. An extension from Green Island Borough to Brighton, which highway is now paved, should be included.

Other rural standard work which is urgently required is the extension of the Balclutha-Milton State Highway (recently completed) to Dunedin, thereby completing the highway from Dunedin to Clinton. The completion of the present programme will leave this gap, and as the highway has already been surveyed and finally graded and paved it is expedient that this section be undertaken first opportunity.

The State highway north from Dunedin is now paved practically all the way from Waitati to Waitaki, extending through Oamaru. On the completion of the rural standard survey of the new deviation, Dunedin to Waitati via Leith Valley and Pigeon Flat—the work now being in hand—consideration might be given to the advisability of extending the rural standard traverse to Oamaru, and finally to Waitaki, to link up with Canterbury.