

tunnelling and three viaducts. The objective is to push the tunnel-construction, this being the controlling feature from the point of view of time required to complete all work. The heavy earthwork is manned in such a manner as to give access to tunnel-faces, and also to complete sections of formation, in order to facilitate pushing the rail-head south from Wairoa at the earliest possible date.

In my Statement of last year I intimated that the matter of route for the railway between Wairoa and Gisborne was being most carefully investigated. Following on the completion of trial surveys and comparison of estimates, it is apparent that the coastal route is much better and more economical to construct than any other so far explored between Wairoa and Gisborne.

Stratford Main Trunk Railway.—On the eastern end most of the work has been done on the Ohura Section, with the result that Ohura Township and district now have a regular passenger and goods service, run by the Public Works Department. The formation, platelaying, and ballasting of the main line is complete to 19 miles 10 chains, and most of the same classes of work in the station-yards, including Ohura Station, is complete. The railway-bridges built or completed during the year total 495 lineal feet, and three road overbridges were also erected. Following on a thorough investigation into the relative merits of the Tatu, Tokirima, and Mangaroa routes into the Heao Valley, a commencement was made in October last with the formation on the section beyond Ohura. Two steam-shovels are at work, and the driving of the bottom heading of the Mangatawa Tunnel has been begun.

The feature of the work at the western end of this railway is the very rough country and heavy work on the Heao Section, about 7 miles in length. Here the railway will cross a series of four ridges or divides, involving a total of 12 miles 24 chains of tunnelling, in four tunnels.

Last year's Statement explained that a main construction camp was being completed at Raekohua, and one of the problems that was solved during the year under review has been the provision of access suitable for construction purposes over the several divides to enable the tunnels to be manned simultaneously. This is necessary to ensure the construction programme being completed in reasonable time, and in accordance with this programme a commencement has been made on tunnels 1, 2, and 3.

It may be said that at least one-fourth of the expenditure and work on the western end during the period under review has been on preparatory work and access construction. The benefit of that expenditure will be seen in the construction results for this and succeeding years.

Palmerston North Railway Deviation.—This work continued steadily though on a relatively small scale during the year, but towards its close a larger programme of work was started and additional plant put into use. The work so far has been confined to formation and drainage works in the vicinity of the new passenger-yard.

On the Hutt Valley Railway duplication the principal work done was in the completion of overbridges and the Hutt River Bridge, and of the ballasting-work on the line. The section was handed over to the Railway Department on the 25th May last.

SOUTH ISLAND LINES.

Midland Railway.—Work on the Kawatiri-Murchison Section of the Midland Railway is in hand over a length of approximately 5 miles, being the length from the Kawatiri Station to the Gowan Station, of which the southern end is at 67 miles 9 chains.

An investigation into the advisability of continuing construction of the railway beyond the Gowan has been made, from which it is clear that present transport conditions do not warrant any further extension of construction. This matter will, however, be further investigated when the amount of traffic offering on this new section of railway has been ascertained.

On the Cascade Section of the Westport-Inangahua Railway, the main work has been the completion of the formation, platelaying, ballasting, and bridging on a 3-mile length to the sidings for the Cascade Coal Co. at the 9-mile. The company will flume its coal 7 miles from mine to siding. A trial run shows the flume to be successful, and it is anticipated that a considerable coal traffic is likely to develop on the section very soon.

On the adjoining Cascade-Hawk's Crag Section, a commencement has been made with preliminary work preparatory to continuing construction on the section.