

A survey for a new route by tunnel under the city to Morningside is now in hand, and it was intended, when the survey was complete, to go on with the work.

Paeroa Rearrangement.—This work has been completed. The provision of the new station and yard was necessitated by the improvement and stop-banking of the Ohinemuri and Waihou Rivers, which involved raising the line and shifting the station to a new site.

The double line from Auckland southward has been extended to Papatoetoe, with great advantage to traffic operations, and plans are in hand for extension through to Papakura.

Palmerston North.—The work here is intended to relieve congestion, to give greater expedition in train-handling, and to avoid the necessity of running through the middle of the town. A special Royal Commission was appointed to inquire into the question of the desirability of this work, and it reported wholly in its favour. This report was also supported by the Fay-Raven Commission. The work is now in hand.

Wellington New Yard, and Wellington - Tawa Flat Deviation.—The above works stand in relation to Wellington practically in the same position as the Auckland new station and the Auckland-Westfield deviation stand in relation to Auckland.

So far as the terminal facilities at Wellington are concerned, they are not only out of date and inadequate, but, by reason of the inconvenience of working with two stations, costs are much higher than they should be having regard to the quality of service that can be given under present conditions. The outlet from Wellington is also obstructed, as in the case of Auckland, with very severe grades and curves. There are also a number of tunnels, which make travelling, particularly up the heavy grades, most objectionable. A review of the conditions, both from the points of view of standard of service, public convenience and economical operation, leaves no room for doubt about the absolute necessity of undertaking the above-mentioned works.

In the Hutt Valley a new double track has been laid from the vicinity of Lower Hutt Station to Waterloo Road. The Government acquired a considerable area of the land to be benefited by this railway, and for the first time in New Zealand the principle of crediting the railway with the increased value of the land accruing from the construction of the line has been applied. A branch line has also been provided for from the above-mentioned new line to serve a large area in the locality which is being developed as an industrial area. It is confidently anticipated that a great stimulus to rail traffic in the Hutt Valley will result from the provision of these facilities.

Regarding the *Rimutaku Deviation*, set down for commencement next year, and estimated to cost £1,000,000, it may be possible to avoid the need for this work by taking advantage of later developments in electric traction or by using other special locomotives. The Department's officers are investigating this now.

Pelichet Bay Deviation - Dunedin.—This deviation has been completed and brought into use. This work was necessitated by the reclamation and development of land by the Otago Harbour Board, and was carried out under agreement entered into in 1912 with the Harbour Board.

Marshalling-yard at Middleton.—Improvements at Christchurch and Lyttelton Yards and Duplication of the Christchurch-Lyttelton Line: An investigation into conditions that were operating at Christchurch showed that work there was becoming so congested as to render it impossible for the same to be carried on with due regard to the safety of the staff and efficient and economical working. The necessity of having a yard where the marshalling could be done separately from the local shunting became quite apparent. It was decided at first to place this yard at Woolston, but further investigation led to the conclusion that Middleton would be a more desirable site, and a yard has accordingly been installed at that place.

So far as the other works mentioned in the above caption are concerned, it was subsequently decided to electrify the Christchurch-Lyttelton line instead of duplicating the tunnel. The line is now a double one between Christchurch and Heathcote. As far as the tunnel is concerned, the principal trouble in connection therewith has been the unpleasant conditions arising from steam operation. Investigations showed that if electrification were adopted the tunnel would be adequate to cope with the traffic for a good many years to come, while, of course, electrification would also do away with the unpleasant conditions associated with steam operation. It was decided, therefore, to electrify the line instead of duplicating the tunnel, and, as regards the alterations to the yards at Christchurch and Lyttelton, it had been decided to watch the effect of the electrification in actual practice before coming to a final decision as regards the yard alterations.

Station-yards have been rearranged and improved at Hikurangi, Frankton Junction, Otorohanga, New Plymouth, and Helensville. A thoroughly modern engine-depot has been provided for Westland.

So far as Otorohanga is concerned, although anticipated that the work as originally planned could be deferred until the eighth year of the programme, it was found necessary in the interests of economical working to proceed with a modified scheme of rearrangement. This work has now been completed, and will permit of the major scheme being deferred in the meantime.

Electric Flood-lighting has been installed in nine principal station-yards, and electric-light equipment has been provided at 1,716 houses and 182 stations.

Level Crossings.

The policy set out in my 1925 Statement provided for the elimination of the more dangerous level crossings and the provision of warning-appliances. This policy is being carried out.

The Railway Department has always borne its share of the cost of eliminating level crossings at those points where local bodies have agreed to pay a reasonable proportion of the cost. Since the institution of the Main Highways Board the Railway Department has worked in conjunction with that body in carrying out proposals for improvements at road and railway intersections.