

*Bridge-strengthening (North Island Main Trunk).*

To enable X engines—the heaviest type of engines at present being built in New Zealand—to be used between Wellington and Auckland, and so facilitate the working of goods traffic on the Main Trunk line, it will be necessary to strengthen ten bridges between Frankton and Taumarunui. The cost of bringing the bridges up to our latest standard (maximum of 14 tons axle-load) will cost £22,000. I have included an item of £50,000 in the proposed loan to cover this, and so as to be in a position also to strengthen bridges on other sections where the trains are having to be limited for the same reason.

*Duplications.*

The main line between Auckland and Frankton is seriously congested at certain times, especially during the summer season, when the full Rotorua and Thames services are running. In order to effect the necessary relief it is proposed to duplicate the single line between Penrose-Papakura, Ohinewai-Huntly, and Horotiu-Frankton. The Horotiu-Frankton duplication will cost £40,000, and should be put in hand at once; it will take about a year to complete. The Ohinewai-Huntly duplication will cost £40,000, should be put in hand in two years' time, and will take two years to complete. The duplication from Penrose to Papakura is required both as a relief to the main line and to develop the Auckland suburban business. The capacity of the single line between these stations has reached its limit, yet there is every prospect of the suburbs spreading rapidly. The Department is not in a position to cope with additional traffic, and therefore the duplication should be taken in hand without delay. The work, which will cost £80,000, will take three years to complete. The new Parnell Tunnel, which is already in hand, will simplify the problem of handling the Auckland suburban traffic, and every effort is being made to push forward with the tunnelling-work.

*New Stations.*

The most serious question that has to be faced by the Department at the present moment, because of the expenditure involved, is the rebuilding of the stations and increasing the terminal accommodation in the principal towns in the Dominion—viz., Auckland, Wellington, and Christchurch. It is most unfortunate that the work at all the centres should have to be undertaken simultaneously, but the necessity for further accommodation is so urgent in each case that it is quite out of the question postponing the raising of the necessary loan any longer than is avoidable.

Statistics have been compiled to arrive at the extent of the present accommodation, the amount of traffic now being handled, and the growth of business, and it is evident from these records that if the rate of increase of recent years be maintained at Auckland and Wellington the railway traffic offering in eight years' time will be double what it is now, whilst the rate of progress beyond that period may be expected to be at least at the same ratio. In both the towns mentioned and at Christchurch the accommodation for both passenger and goods traffic is even now below requirements at busy seasons, and therefore it is evident that no time should be lost in undertaking the new works, having regard to the fact that they cannot be completed in much less than five years from commencement of operations.

In addition to the centres named, new stations and yards are required, involving considerable expenditure, at Palmerston North, Hastings, Lyttelton, and Timaru.

*Auckland Station and Yard.*

The accommodation at the existing station is already overtaxed, the business only being carried out at much inconvenience to the public and at excessive cost to the Department. Sufficient accommodation for the future cannot be provided on the present site, owing to its cramped position, being bounded on either side by Customs and Quay Streets, by the post-office at the west end, and by Breakwater Road at the east end. The platforms are too short, and to lengthen them would entail the closing of Breakwater Road, an undesirable proceeding.

In order to obtain sufficient space for a passenger-station capable of dealing with the Auckland traffic of the future and yet maintain a connection with the existing line to Kaipara and Penrose via Newmarket, a site on Beach Road opposite Eden Street has been selected, the suburban station, with connections to Newmarket, being elevated about 15 ft. above and to the south of the main-line station.

The intention in designing the new station is that the traffic north via the Kaipara line and the suburban traffic to Onehunga and south via Remuera will be dealt with at the High Level station, south main-line traffic being handled at the Low Level station and travelling on the proposed new line via Hobson and Orakei Bays and joining the present Main Trunk Railway at Westfield. The large area of land which the Department has been in process of acquiring by reclamation in Mechanic's Bay since 1911 as a site for the new station and yard all lies east of the Parnell junction with the present Main Trunk Railway, and in view of the situation it would be impossible to utilize this land to proper advantage and to lay out a workable station and yard without an alternative to the present outlet for south-bound traffic. The route via Hobson Bay is an admirable solution of the problem; by this means full advantage is made of the reclaimed ground, and the railway can be laid down with a maximum grade of 1 in 132 to Westfield, as against 1 in 43 via Newmarket, the difference in grade giving an increased engine-load of 150 per cent. A plan showing the lay-out of the station and yard is attached (Appendix No. 3).

The new railway will open out an entirely new suburban area for Auckland, bringing Orakei, Panmure, and the desirable country in this neighbourhood within a few minutes by train of the business centre of the city.