

part of course of Waitara River right up the coast. This belt of rough country makes road-communication with the sea-coast very difficult and long, a feature which is all in favour of this route.

In order to shorten the distance to seaport at New Plymouth or Waitara, the line should connect with present line at Stratford. The necessity of Eltham as the junction has ceased since the adoption of the Central line as the means of communication between Wellington and Auckland.

Awakino Route.

The great drawbacks to this route are its being along the sea-coast for half its length, that it connects two shipping ports, that for fifty miles it must depend upon a belt of very rough country for traffic from which a minimum quantity can only be derived, and that the Port of Mokau will deprive it of a large percentage of its revenue.

PORT OF MOKAU.

The Mokau River at its embouchure has excellent natural advantages for the formation, at a small outlay, of a good port, suitable for moderate-sized vessels drawing up to, say, 12 ft. of water.

There is a bold headland on the south side, skirted by a reef visible at low water, which forms a natural training-wall in a good position for and does maintain the channel across the bar in a permanent position. There is an extensive tidal basin extending some twenty miles up river, giving great scouring force, which only requires to be confined by short sea-walls to give a permanently deep channel through the sand-bar. A short length of half-tide walls are also required to maintain the channel inside the bar in a permanent position, and with somewhat flatter curves than exist at the present time. There is a sand-drift along the coast from south to north, which, however, would cause little trouble, as the tidal scour and river-floods will be quite sufficient to maintain a deep channel when controlled by suitable walls.

With the port thus improved and served by good metalled roads, the country surrounding will be in a better position than if it had a railway-line along the sea-coast.

The country for a considerable distance from the coast is suited principally for sheep-grazing, so that in a few years a large export of wool and meat will arise from the Tongaporutu, Mohakaitino, Mokau, and Awakino River Valleys, which can be most economically dealt with by way of this port, either by lightering to foreign trade-vessels, as is done at present at Waitara, or by coastal steamers transshipping at the larger ports. The harbour improvements mentioned would enable lightering to be carried on at any state of the tide.

In addition to the products of the soil, there will in the near future be a considerable export trade in coal from the mines up the river, and possibly also in time from the limestone deposits, which will demand some harbour improvements, which cannot be avoided by constructing a railway.

The roads for serving the port should be located at the bottoms of the valleys, and, wherever possible, with an even grade throughout, the higher country having a lighter description of road always falling towards the main valley roads, so that all export traffic may naturally gravitate towards the shipping port. The useless rises and falls so often seen, particularly when attaining the extent of that over Taumata-maire Ridge, in Awakino Valley, should be avoided as causing useless expense for haulage, which can only detract from the prosperity of the district.

The country towards the upper part of the Awakino Valley, and upon which the Awakino route would have to depend for the bulk of its revenue, can be admirably served, and the necessity for a railway avoided, by locating the main road from Taranaki to the Waikato (which is now in course of construction) down the bottom of the Awakino Valley to the Heads, thence to the Port of Mokau, and metalling it with the laminated limestone before mentioned, it being admirably adapted for breaking with stone-crushers at very little expense.

DISTANCES.

Attached hereto is a table of distances from Auckland and Wellington of important points along the various routes, and also along the Central line.

PLANS AND REPORT.

Forwarded herewith is a plan of Taranaki showing the several routes, also a drawing showing the longitudinal sections of each route, and also a report, with plan, by Mr. A. C. Koch, Assistant Engineer, who was instructed to assist me with the exploration.

RESPECTIVE MERITS.

Ngairi Route.

(1.) Can draw traffic from the largest area. (2.) No formidable engineering-works. (3.) Good country suited for close settlement extends on both sides of the line for 76 per cent. of its length.

Waitara Route.

(1.) Formidable engineering-works. (2.) High cost per mile. (3.) Good country suited for close settlement extends on both sides of line for only 49 per cent. of its length.

Awakino Route.

(1.) Easily constructed. (2.) Best grades. (3.) Good country suited for close settlement extends on both sides of line for only 40 per cent. of its length. (4.) Runs too near the sea-coast. (5.) Has to compete against sea-carriage.