

but the land is exceedingly poor. I followed a considerable distance up each of these rivers with a view of finding a better route, but each has formidable gorges a few miles up, and leads off in an unfavourable direction.

At 184 miles there is an extensive Native pa, with large cultivations of good land up on the hills some 300ft. or 400ft. From the Waimika the line goes up a small creek called Ohinemoa: fern for about two miles up, and good land. At the head of this creek, which is bush, there is a watershed, which will have to be pierced with a tunnel some 20 chains long. There are two ways of overcoming the hill—one by grading up from 179 miles, mostly over open hill land and terraces, in which some of the cutting would be rather heavy, and soft sandstone rock would be met with occasionally, the other, to which I give the preference, would be to follow up the Ohinemoa at a lower level, and pierce the hill with a tunnel into a branch of the Mokau called Te Mangapihi. The work on this line would be much lighter, but two bridges over the Ongaruhe would be necessary, one of 70ft. and the other of 120ft.

From this point to Te Awamutu (some seventy miles) the country may be called all good, and, with the exception of about four miles, is all open.

The Mangapihi, a branch of the Mokau, contains limestone, and the line follows it down for about three and a half miles. It is a flat grass valley, with its stream flowing without rapids, and has open hills with occasional bush patches on either side. The land is of good quality.

At 194½ miles the line crosses a low place in the watershed into the Paritikona, which is followed down about three and a half miles, and from thence, at 198 miles, crosses another low place in a watershed to the main stream of the Mokau, which is followed down seven or eight miles. Each of these valleys is similar to the Mangapihi. Another low watershed is now crossed into the Waititi, which is nearly all open fern and grass, with perhaps a mile of bush. The land in this valley is also very good, but the valley falls rather quicker, and about six miles down it joins the Mangaokewa, which is at this point a rocky limestone gorge. Just beyond a low place occurs in the hills very suitable for the railway, which leads direct to Te Kuiti. It is remarkable that all these watersheds are mere razor-backs one to two chains wide, consequently the earthwork will be inconsiderable.

Te Kuiti, the former residence of King Tawhiao, contains a number of whares. Above Te Kuiti the Mangaokewa runs through limestone gorges, and does not offer inducement to seek the other route of the Ongaruhe or Waimika. From Te Kuiti to Maraehine is splendid grass and fern country, following down the Mangaokewa, Mangapu, and Waipa, which have flats of considerable width, and some large patches of timber, chiefly white-pine and pukatea.

Brown coal is visible in a creek which I visited near the Mangawhero, some five miles off the railway-line.

A low watershed occurs at Maraehine, another across the Mangaorongo, and another near Puniu, all of which are inconsiderable. This latter place is all open country, and presents no difficult feature.

The length of the line shown on my section is 244 miles, which corresponds with my field-book, but which I could by no means find room for on the map. The difficulty of judging distances is very great, and can only be a rough approximation, especially as the only marks I could make use of were the larger mountains, which are themselves not yet correctly placed on the maps. I consider the line will not exceed 200 or 210 miles in length at the outside, and I am also of opinion that, on survey, the grades will work out more favourably, probably nowhere steeper than 1 in 80. The probable cost per mile, including everything except land, may be estimated at from £6,000 to £6,500.

In conclusion, I may say that I made notes all through my trip of whatever seemed to be of value in the way of information—but, the time being so short in which my plans and report have to be prepared, I have not attempted to mention anything beyond what is required in a report of an exploratory survey.

I have, &c.,

The Engineer-in-Charge, North Island, Wellington.

JOHN ROCHFORD.

Appendix to Mr John Rochfort's Report.

FINDING my report as to the line of railway would become complicated by attempting to introduce any particulars as to the Natives encountered along the route, I do so in the form of an appendix.

Before commencing work I obtained letters from Mr. Woon and the Rev T. Grace to the following Natives along my route: Hoani Mete, Wiari Turoa Ma (Porewa), Nika Waiata, Teata Pikirau, Ropana (Ngahurukehu), Meriana, Patihapa (Raketepauma), Porokoro Patapu (Murimotu), Meiha Keepa, Aropeta Haeretu, Paora Patapu (Murimotu and Ranana), Hirika te Rauapo, Ihakara, Meiha Topia Turoa, Te Heuheu, Matuahu, Kingi te Harakeke, Kingi Topia, &c. (Murimotu, Taupo, and Tokaano), Ngarupiki, Tukimata, Ngatai (Tuhua).

26th June.—I commenced work at Marton, and after about a fortnight, during which it rained almost incessantly, arrived at Ngahurukehu. At Turangarere, where I first met any Natives, they were unwilling to let me pass until a general meeting took place—but, as the opposition was feeble, I went on, and have since had a letter from the same people, requesting me to come again and see the advantages they had to offer for the railway coming there.

On arriving at Kerioi I was stopped by the Natives (said to be twenty armed men, but found afterwards to be only six) occupying part of the Rangataua Block (Government land) who allege that Adamson (employed by me on the work) had sold land on the part of Nika Waiata—the woman who is living with him, and who, by the way, is a great warrior—to the extent of three thousand acres more than belonged to her. Pita te Rahui and others were said to be placed in possession of the Rangataua Block by Major Kemp and his council until satisfaction was had for the lost land, and I was informed that if I went on I should be shot. I soon found out that Adamson's presence only added fuel to the fire, and discharged him. Finding Major Kemp was the head, and that he