

line of the Northern Island that will best serve it. If an available pass existed leading from the Upper Waipa Valley by the westward of the Rangitoto Range into the Taupo Plateau, it would be a question then between Alexandra and Kihikihi, requiring for its solution an examination of such pass, and in a general way the whole route lying through a country only recently allowed, in a passive sort of way, to be traversed by Europeans. But all whom I have consulted, and who have travelled the route, agree in declaring the country to be exceedingly mountainous and impracticable.

The route by Kihikihi means the old native track from Te Awamutu to Napier *via* Taupo, by which the overland mails were carried for many years, and it passes our frontier line at Orakau.

This track has not been lately used as a road to Taupo, but I am informed the country is good between the eastern side of Rangitoto and the Waikato; that the range of the mountain blends gradually with the central plateau, and presents no special difficulties. That the valley by Orakau to this plateau of Upper Waikato is generally favourable, is evident from the fact that hills of very moderate elevation on the banks of the river far above Manugatautari are visible at Alexandra. I examined the Native track beyond Orakau for some miles, and the country looks very favourable for the purpose in view.

The route to Taupo by Cambridge runs through the Maungatautari Gorge, keeping the proper right of the river; southward of the above range, by crossing the Waikato, the line might take the same country as by Orakau. I do not think the Cambridge route is likely to prove so easy in point of construction as that by Orakau,—speaking of extension to the interior,—and I believe it only remains to consider if questions of locality are likely to prove more favourable, and influence decision in favour of the former. And towards this, I am inclined to think that had the question been between Cambridge and Alexandra alone, without reference to extension, the proximity of the latter to the large Native population, and its consequent strategical position, would, even if other things were not equal, point to it as the terminus of the railway. And it is clear that a line by Te Awamutu, Kihikihi, and Orakau, presents practically the same advantageous features, and on this head is preferable to a more easterly route.

The question of strictly local traffic is the only other point which presents itself in the comparison, and looking to the equally excellent quality of the land in all the frontier settlements, and the steady progress each is making in settled population, it is impossible to say that Cambridge in this respect possesses any advantages over a strictly central route. Considering, again, that Cambridge and Alexandra are each at the head of a navigable river, a central route between would afford more accommodation to the country than one alongside either river.

For the foregoing reasons, then, I believe some suitable position in the valley of the Mangahoi just below Kihikihi and about mid-way between Te Awamutu and Orakau, to be the most suitable place for a temporary terminus; the line to be hereafter extended across the frontier at Orakau.

Having arrived at this conclusion, I feel that it will not be proper to leave the subject without considering it in another aspect—one which has commended itself to all with whom I have spoken in the Waikato, and to those elsewhere who are interested in the question of opening up the greatest amount of country at the least expense. The proposal is to use the river between Mercer and a suitable head of navigation for conveyance of traffic, and make a railway from that point to the frontier. The money which would be otherwise expended in making a railway along the banks of a navigable river, to be invested by the Public Works Department in the Colonial Funds, and be thus available for extension into the interior when the proper time for so doing arrives.

It is not without some hesitation that I enter on this subject, being one foreign to the instructions under which I am writing; but, as I believe the cost to be a proper one, and the policy of making use of the river, so long as the traffic can be carried on it, so commendable to common sense, and in consequence having a reasonable chance of being adopted, I feel that any investigation would not be complete were it to leave out consideration of the case from this view, especially as a greater amount of diversity of opinion might arise as to where the head of the navigation should be considered to exist, than as to the best locality of the frontier terminus.

The inquiry with this view presents a problem more difficult for me to solve, with satisfaction to myself, than that of the frontier. The consideration is a wide one, extending over a choice between the present heads of navigation, Cambridge and Alexandra, the lower and more central position of Ngaruawahia, or any intermediate point on either river. Cambridge possesses the deepest and shortest river, but the swifter current renders the time in steaming from Ngaruawahia to Cambridge or Alexandra practically the same. Alexandra is not now accessible in the height of summer, but I am satisfied that there are only three very trifling obstructions, and the expense of removing them, and making the whole river navigable at all times, with any steamers which can pass the shallows of the Lower Waikato, would be very small, and is, on the other hand, compensated by the greater difficulty in getting the line away from the Waikato, near Cambridge, and at same time have terminus and wharf on the same level. This last circumstance influences the inquiry to such an extent, that I estimate it would require fully a mile and a half of a gradient of 1 in 50 to rise from a good wharf level, near Cambridge, to the centre level of the Moana Tua Tua swamp; and a gradient like this could only be placed in a gully, of which there are several suitable, but all requiring heavy works, although the soil is the most easy conceivable. Towards this end, I examined a gully near the town belt of Cambridge South, Walker's Gully, and Mystery Creek; also, a main outlet of the Rukuhia Swamp, below Hamilton, all more or less favourable.

If an intermediate point on one of the rivers is to be chosen, those places on the Waikato present the attractions of least distance. Presuming the terminus would be where I have before stated, just below Kihikihi, the following will afford a comparison:—

	Miles.
Alexandra to Terminus	12
Ngaruawahia	32
Hamilton	21
Mystery Creek	16
Walker's Gully to Orakau	11
Cambridge	11