

R E P O R T S

ON THE

PRACTICABILITY OF CONSTRUCTING A ROAD FROM WANGANUI TO TAUPO.

PRESENTED TO BOTH HOUSES OF THE GENERAL ASSEMBLY, BY COMMAND OF
HIS EXCELLENCY.

WELLINGTON.

—
1870.

REPORTS ON THE PRACTICABILITY OF CONSTRUCTING A ROAD FROM WANGANUI TO TAUPU.

No. 1.

Copy of a Letter from Mr. H. C. FIELD to the Hon. W. Fox.

SIR,—

Wanganui, 21st December, 1869.

Respecting the practicability of constructing a road from Wanganui to Taupo, I have the honor to report, that I have succeeded beyond my most sanguine expectations in discovering, *vid* the Mangawhero Valley, a far easier and more direct line to Taupo than I had hoped to find in the Wangaehu.

I left town on the 29th ultimo, in company with Mr. A. A. G. Pilmer, late captain in the Colonial forces, having previously written to an Atene Native, who appeared to be the only one who had visited the Mangawhero for very many years, and who had offered his services as a guide, desiring him to join us at Te Pukohu. He failed to come however, having, I believe, been at the Ranana meeting at the time, so we pushed on without him, and had no cause to regret his absence.

After proceeding up the Mangawhero to the point at which we had proposed to cross to the Wangaehu, we ascended the Pukekahu ridge, on which we were surprised to find the Otairi track still so well defined. Owing to the ridge being for the most part a mere razor-back, and the track having been constantly used by the pigs as a line of communication, it is still so open that a horse might be ridden along the greater part of it. From the first high point on the ridge we obtained a fine view of the Mangawhero Valley, beyond the point to which my nephew and myself had ascended it. We found that it was a broad well-defined valley, with comparatively low hills on its eastern side, and that for fully fifteen miles it was perfectly straight, running in a northerly direction exactly towards Ruapehu, after which it trended towards the north-west. A belt of bush several miles wide crosses it just above the point Mr. Monro and I had reached; but beyond this, as far as we could see, the valley and the adjacent land on the eastern side were open. We also noticed that between the bend of the valley and Ruapehu, the dividing ridge separating the Mangawhero from the Wangaehu was for several miles fully 200 feet lower than its ordinary level either towards the north-west or south-east, and that a number of easy-looking ridges led up from the Mangawhero to this low part of the ridge.

On reaching the Wangaehu, I found that the valley, though broad and level, was very winding, and enclosed between very high hills. Its general direction also trended for some miles considerably towards the north-east, and the whole, as far as the eye could reach, was filled with heavy bush, full of supplejack. I found, too, that the course which my experience of the Wanganui and Mangawhero rapids had led me to suggest as a means of ascending the Wangaehu, viz., cutting a line up it, and fording the river on the rapids from time to time so as to keep on the level ground, would be quite impracticable, the river not only running between precipitous banks about 50 feet high, but having, instead of ordinary rapids, a succession of roaring cascades, down which the water rushed in deep channels between huge boulders, the whole as utterly unfordable as the deep pools between the cascades. I have no doubt, from what I saw of it afterwards, that a good road-line could be got up the Wangaehu Valley, and a still better one probably by leaving it again after a few miles, and following up some of the leading ridges extending from it towards the source of the Turakina; but any such line would evidently make the distance from Wanganui to Taupo many miles longer, and probably be not nearly so good as that by Mangawhero. I therefore determined to return at once to the latter river, and follow it upwards. The wet weather we experienced, and the dense nature of the vegetation, delayed us greatly, and added much to the labour of examining the ground and selecting a line of road, so that it was not till the afternoon of the 21st instant that we arrived at Murimotu; but we had the satisfaction of finding an easy line with very little bush along it.

After reaching the point mentioned in my former report, as that at which the line would diverge towards the Wangaehu, instead of turning off it would be better to continue for about a mile across a fern flat to the mouth of a small stream, after crossing which the line would pass for a few hundred yards over a similar flat, and then enter the bush by a rather lower flat, covered by heavy timber, and extending upwards along the river-side about half a mile. For the next half mile or so the line would run at a height of from 50 feet to 100 feet along the face of a hill sloping gently downwards towards the river, and then descend and pass for about a mile farther along another heavily timbered flat. Beyond this the river for some distance washes the base of a steep hill, and then makes a sharp bend to the westward round another steep face, returning in a C curve to its former direction after an interval of about a mile. It will be better, therefore, at the end of the last-mentioned flat, to ascend the hill for about 100 feet by a spur which runs conveniently for the purpose, and passing behind a small toi flat, and over a low saddle, to cross a small stream just above a waterfall about 15 feet high. Thence crossing a hollow, filled with large trees, and over another low saddle, the line would run for nearly a mile along a hollow filled with koromiko scrub and scattered toi bushes.

An extremely well-beaten pig track, which requires little beyond the removal of a few fallen or leaning trees to make it available for pack-horses, then affords a means of crossing a small bush gully on the western side of the hollow, and ascending to a koromiko table on the other side of the stream,

along which the track would wind for another mile. Thence crossing a small stream it would ascend along a dry bush gully to a low saddle, on reaching which there is seen on the other side a long wooded hollow, separated from the river by a low wooded ridge, and containing three small lakes. Descending into the hollow, and skirting the eastern end of the lakes, the track crosses another small stream, and then passes over another koromiko flat close to the river. Two other streams, with another koromiko flat between them, have next to be passed, after which the line reaches a rather steep hill-face, on which a large slip has recently occurred. At present the slipped earth affords a passage below the slip; but as the river bears strongly against it, it is evidently being washed away, so that it will be better, though of course more expensive, to carry the line above the slip. The country now opens completely, and for three or four miles the line could be taken nearly straight across a succession of koromiko and manuka flats by the river side, crossing by the way several streams, one of which, about 8 feet wide, and a few inches deep, is the largest along the whole line. The valley now bends suddenly towards the north-west, and from the neighbourhood of the bend six or eight long ridges rise from near the river, and run northwards towards the low part of the dividing ridge between the Mangawhero and Wangaehu Valleys, affording a choice of routes. I had not of course time to examine these ridges so as to determine which was the best, but they are all of them not only practicable but easy, the only difference being that while those which start lowest down the river, and rise to the very lowest part of the dividing ridge, necessitate either the following of that ridge (which is rather winding and broken) for several miles, or else a descent into the Wangaehu Valley, several miles below where it emerges from the plains, those which start highest up, and run most directly towards the end of the Murimotu plain, necessitate a divergence from the direct line, and the crossing of several more streams at the Mangawhero end, as well as attain a greater elevation at the dividing ridge. On the whole, it seemed to me that one which has a large patch of manuka trees on a flat peak of it about a mile from the river, or the next one to the westward of it, would probably be found the best; but it would be desirable to examine them all before deciding on the one to be adopted. The whole of these ridges are covered at their lower ends by koromiko scrub, which gradually develops into scrubby bush as they rise, and becomes tawa and manuka bush as they widen out into rounded tables in approaching the dividing ridge. From the dividing ridge, the line would descend into the Wangaehu Valley at or near the point at which it emerges from the plains. The distance from the Mangawhero bend to the plains is from nine to ten miles, and the rise to the dividing ridge from 250 feet to 300 feet. The total distance from Wanganui to the plains by this route would be certainly under fifty miles, and I believe will not greatly exceed forty-five miles.

The cost of forming a pack-horse track along it would be somewhat more (probably nearly £100 more) than I previously estimated. This arises from several causes. In the first place, those who lately visited the Murimotu placed it rather too much to the southward of Ruapehu, and allowed too much by several miles for the slope of the mountain. These and the necessary divergences from a direct line make the total length a little more than I had calculated on. Secondly, the bush and scrub are infinitely more dense, and more encumbered with supplejack and bramble, than anything I had ever before met with, except in an occasional patch about the head of a bush gully or on the banks of a stream. But the principal source of extra expense is the wet weather, which evidently prevails in this as in other high wooded regions, and for which a very liberal allowance must be made. Even at this the very driest time of the year, we had only five days without rain during the whole month we were absent from Wanganui; while on the other hand we were storm-stayed in our tent the whole of six days and great part of several others, and travelled in a continual shower-bath all the rest of the time.

As far as the formation of the ground is concerned, there is no difficulty whatever in constructing an excellent line of road, and I was particularly struck by the utter absence of swamp; in fact, except a few heads of raupo on the margin of the lakes, I did not see a trace of swamp all the way from Ongahi to the end of the line. It is only here and there among manuka scrub that there is even a soft place, and this arising merely from the rain saturating ground loosened by the rooting of the pigs. The only difficulty of any consequence consists in the scarcity of material for road metal; but this is a fault which seems to be common to all the blue-clay country hereabouts. The rapids of the Mangawhero and Wangaehu and the flats about the lower part of the line will afford a large amount of granite boulders and coarse shingle, which may be broken up, and I saw one thin seam of gravel in the bed of a stream near Pukekahu; but for the last fifteen miles before reaching the plains I could find no indication of anything harder than a soft sandstone, and but little even of that. The metal for a road would therefore probably have to be brought from the plains and foot of Ruapehu, where it can be obtained in any quantity; but there would be no necessity to metal a pack-horse track, the immense quantity of scrub adjoining it being sufficient to keep it in a rough state of repair for many years to come. I found that the country through which the line goes is almost as much a *terra incognita* to the Natives as to ourselves. From Okuraponga upwards I sought in vain for the smallest trace of the country ever having been occupied, and am satisfied it has never been so. The younger men of the tribe to whom it belongs, and who live near the Wangaehu Bridge, admit that they have never seen it, and know nothing of it except by the report of three or four of the old men; and these last have not visited it for so many years, that either their recollection of it is very imperfect, or they are ignorant of the changes that have latterly taken place. For instance, these old men all agreed in describing the country about Paparoa (a very long and turbulent cascade at the bend of the valley) as being covered with fern and a few tutu bushes. This was probably a correct description fifteen or twenty years ago, but since then the pigs have destroyed nearly all trace of fern, and its place has been supplied by koromiko. This, again, is now fast dying out and giving place to larger scrub, among which forest trees growing up indicate that, unless occupied, the whole district will in a few years be a mass of scrubby bush. At present it would make excellent cattle runs, and the construction of a track through it would of course tend greatly to hasten its occupation for that or some similar purpose. From some of the high points to which we climbed to examine the Mangawhero Valley, and particularly from some on the dividing ridge near the end of the line, we got a good view of the country to the

eastward of the Wangaehu. I found that within the belt of very high land which extends from east to west about twenty miles inland, there is lower hummocky country extending to the plains. This is all covered with scrubby bush, but seems to offer no other impediment to road-making. The fall everywhere is towards Wanganui, the leading ridges east of the Wangaehu heading upwards towards the source of the Turakina, and those beyond the Turakina towards the headwaters of the Rangitikei, the watershed in every case being just on the western side of the river.

The accompanying tracing from a sketch map will perhaps enable my description of the route to be better understood.

The Hon. Mr. Fox.

I have, &c.,

H. C. FIELD.

No. 2.

Copy of a Letter from Mr. GEORGE F. SWAINSON to the Hon. the COLONIAL SECRETARY.

SIR,—

Tutu Totara, Rangitikei, 29th January, 1870.

With reference to my Map of Rangitikei, Kaimanawa, and Taupo, lately forwarded to the Honorable the Premier, I have the honor to make the following special report on the Rangitikei route, which was taken on our upward journey.

The Hon. the Colonial Secretary,
Wellington.

I have, &c.,

GEORGE F. SWAINSON.

Report.

THE track (an old Native one) enters the main bush about three-quarters of a mile to the northward of the boundary line, at Major Marshall's, near the Rangitikei River; passing over terrace land for about the first three miles, it descends into Pourewa Valley, through which it passes with a general bearing of N.N.E. to N.E. for about thirteen or fourteen miles.

The track, as usual with Native paths, winds about very considerably, following in many places every bend of the stream. The distance would, of course, be much shortened by survey, whenever a permanent road is laid off. It is, however, perfectly level, and the bush very open. The present track crosses the Ponoewa Stream nine times, but these crossings would probably be avoided. Three or four swampy backwaters, probably the old bed of the river, are the only obstacles requiring to be bridged. Metal can be obtained all through from the bed of the stream. At about the distances mentioned, the track leaves the valley; turning to the eastward, by an easy spur you ascend the hills between it and the Rangitikei River. This hill portion is probably about three miles to the Manga-onoko Stream, which runs into the Rangitikei. From thence to the junction of the Mokohina with the before-mentioned river it passes over a lower and upper terrace, heavily timbered, till it reaches the cliff overhanging the river.

At this point a good side-cutting is required. Crossing the Makohina, a large stream with this peculiarity, that when both rivers are flooded Rangitikei backs up into Makohina, and makes still water,—then about three-quarters of a mile by the edge of Rangitikei, and the track leads again on to the terrace above,—a side-cutting would be again required. On this terrace is first a small open flat, called Pauerawera, and half a mile further a second, of some three hundred acres in extent, named Ohingaiti. Makohina, I consider to be about twenty or twenty-two miles from Major Marshall's, and the whole distance is constantly done in eight hours, even in the present state of the track.

At Ohingaiti you again enter the bush, which is unbroken until you gain the open country at Patea, and the track follows the most leading ridges and spurs the whole way. The general ascent to the summit of the Whakuaue range is gradual, and offers no impediments of streams or ravines. The descent to the Hautapu Stream requires exploring for a better line than that taken by the Natives. The portion of the road from Ohingaiti is comparatively new, having only been made since the disturbances.

I put the distance from Ohingaiti to the Pakehiwi Settlement, at Patea, at twenty-eight or thirty miles. It took our men fourteen hours, driving unladen packhorses, to do it in. The average would be about two miles an hour. From Pakehiwi to Mr. Birch's station, nine miles; and from thence to Napier (Town), seventy-five miles, all through open country.

I consider that £500 would make a first-class bridle-track through the bush. The side-cuttings I have mentioned would be the only heavy work. No streams to bridge or swamps to cross; and although perhaps unfitted for a military line of road, would, until the country is more able to afford it, answer the immediate purpose of opening communication between the West Coast and the interior of the country at a small expense.

GEORGE F. SWAINSON.

No. 3.

Copy of a Letter from Mr. JAMES HOGG to Mr. EDWARD CHURTON.

SIR,—

Turakina, 26th January, 1870.

I beg to submit to you the following report upon the line of road which I have been exploring between the Taupo plains and Wanganui.

Before leaving Wanganui it was impressed upon me by the directors that it was very necessary, in order to secure the Port of Wanganui, that the most practicable and direct road should be found to open up the Taupo country to the enterprise of the people of Wanganui in the prospect of a gold field being found in the Kaimanawa ranges. Having well examined the country between the Rangitikei River (Patea) and the Wangaehu, and having gleaned all the information possible from the Natives (through Mr. Swainson) both of Taupo and Matatara (on the Wangaehu), I came to the conclusion that the best route in every point of view was that by the Turakina Valley. At the head of the Turakina River the open plains extend further south by about nine miles than at any other

point between the Rangitikei and Wangaehu Rivers; and further, the valley, which is wide, has beautiful flats on both sides of the river, running perfectly straight about due South for a distance of nearly twenty-two miles. Both sides of the river banks are covered with beautiful timber, consisting of totara, matai, and white pine. On the left bank over the range the country is open and grassy, extending a long way over towards the Rangitikei River, and dotted with bush. This will make a fine grazing country. On the right side of the valley the flats rise one above the other in terraces and recede towards the range, behind which the country towards the Wangaehu is very broken and covered with bush. Both sides of the valley are very favourable for the construction of a good road, but the left side is the best of the two.

The horse track is cut through the first and second patches of bush, and the line through the open staked out with flags; and from the south of the second opening down to Mount Prospect the horse track is also cut. At Mount Prospect the track crosses the river, where it is about twenty-five feet wide. It continues down the right side for about six miles, and crosses again to the left side, down which it continues all the way to the boundary of the block. That part from the crossing at Mount Prospect down to the second crossing will be abandoned and be continued wholly down the left side, to where it will cross over to the Wangaehu River, which portion has yet to be examined and decided upon.

The other tributaries which flow in from the East have low banks and hard shingle beds and seem to be easily forded.

To cut the horse track through to the open on the Wangaehu would take three men a month, and would cost about £35. I would have continued the cutting of the horse track, but our provisions would not hold out long enough to do so. We were every day getting further from Captain Birch's, to whose place there is a very bad track; there was also the uncertainty of getting provisions when I sent, as he was often out of them, and the man has had to return without; and as all the friendly Natives had left the Taupo and Patea Districts, it was extremely dangerous for a man to travel alone with a pack-horse, as Te Kooti's scouts were known to be prowling about the deserted pas. I therefore decided to cut our way through to Wanganui and begin from this end; we could get regular supplies of provisions, and at a lower rate.

When the track is properly opened up, a man will walk from Wanganui to the plains in sixteen hours. A thousand pounds expended in making a few chains of side-cutting at different places, and in removing fallen trees and other dead timber, would enable a horseman to ride the distance in a summer's day very comfortably. There are no obstacles whatever to be surmounted. The valley is just similar to what we all know the Turakina Valley to be at the lower end from Mr Lethbridge's up.

I have, &c.,

To Edward Churton, Esq.,
Legal Manager of the Wanganui U.G.M. Co.

JAMES HOGG,
Civil Engineer.
