

The Tirohanga Valley is a very precipitous gorge valley all the way up the hills, starting at 300ft. high within the first mile, and getting to 600ft. before three miles are reached, whilst the rise in the stream in the bottom is very little more than 100ft. The stream is full of short, sharp turns with deep side valleys, which would necessitate very heavy work and sharp curves. At the head of this stream, about six or seven miles out, the country is about 650ft. high. This might be reduced a little by tunnelling, but not to any very great extent. So that the conclusion come to is that this route would not be worth further consideration.

The other route mentioned, starting from the Akeake flag-station and going up the Karetu River, was then looked at. This is a very much more favourable looking route, and, as far as could be seen, would not present any very serious difficulty, except the bridge, 20 chains long, across the Kawakawa River at the start, till the watershed between the Owa Stream, running north-west into the Karetu, and a small stream running south-east into the Waiotu, was reached. This watershed is some 650ft. to 700ft. above the sea, and only about six or seven miles distant from the Akeake Station. If this height could not be reduced somewhat by a tunnel, which on trial might be found feasible, and thereby some 100ft. or 200ft. in height saved, this would mean a 1-in-50 grade for six or seven miles. Then, after crossing this watershed, a descent of some 200ft. would have to be made to cross the Waiotu before the Puhipuhi Forest would be reached, close to the south-west corner of the Taumatakinau Block; but here the line would be quite stopped as far as entering the Puhipuhi Forest is concerned, as immediately in front of this the Puhipuhi hills rise out of the Waiotu Valley with a short, sharp ascent to a height of 1,200ft. above the sea, which is the highest part of the forest, and from which on the top there is a general easy inclination to the southward, the apparently natural way for the outlet for everything. The line, instead of going into the Puhipuhi Forest, would have to keep to the west of it down the Waiotu Valley, which is a comparatively level route, and come out at the Hukerenui Settlement, the end of the recent survey from Kamo to Waiotu. So that beyond getting the timber in the Waiotu Valley, which is the most scattered and thinnest part of the bush, very little would be gained, as the timber from the Wairiki and Kaimamaku would still have to come down to the head of the Hikurangi Swamp to be got at.

This line would go within a short distance of the new silver-reefs at the upper end of the bush, and could be connected with an incline or wire tramway. On the whole, I consider this route very much inferior to the through route already proposed by the west side of the Ruapekapeka Mountain. The grades on that line will be better; a larger extent of country will be benefited, and, probably, extensive coal-seams found both through the Hukerenui, Towai, and Waiomio districts, whilst the question of getting out the kauri timber from the forest will be very little affected.

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