## Sub-Enclosures in No. 2.

## EXTRACT FROM JOURNAL OF MARLBOROUGH PROVINCIAL COUNCIL.

## PICTON AND WAIRAU TRAMWAY, 1863.

Picton, 9th October, 1863.

Captain Baillie proposed that Mr. Dobson be requested to attend the Council to answer questions relative to the Picton and Wairau Tramway.

Carried unanimously.

The following questions were then put to Mr. Dobson by the Council:-

Question.—Are you a Civil Engineer?

Answer.—Yes.

Q .- You have had considerable experience as an Engineer?

A.—I have had considerable experience on the Norfolk and East Anglian Railway.

- Q .- Are you well acquainted with the country between (this) the Port of Picton and the Wairau Plain?
- A .- Yes; I have been employed at various times during the last eight years exploring, and know the country well.
  - Q.—Can you inform the Council what was the estimated expense of the previous line proposed?

A .- The line proposed in 1861 was estimated at £4000 per mile,

Q .- Have you made a recent survey of a line of railway between Picton and Blenheim?

A.—Yes; I have.

Q.—What is the estimate of the present proposed line per mile?

A.—£3,300.

Q.—What would be the comparative cost of working the two lines?

A.—The cost of working the new line would be about the same as the old line, the present line being five miles longer.

Q.—To what do you attribute the difference?

- A .- Since I made the estimate of the former line, I have obtained from England more definite information as to the capabilities of light engines on steep gradients, which has enabled me to reduce many of the expenses of the former line.
  - Q.—Do you consider the proposed line of road adequate to the requirements of the Province.
- A .- Yes; it is for many years. The steepest gradient on the new line will admit of being reduced at a future time without deviating from the route.
- Q .-- You state in your report that the steepest gradient on the south side of the saddle is 1 in 55

 $\mathbf{A}.\mathbf{--Y}es.$ 

Q.—You also state that the steepest gradient on the north side of the saddle is one foot in twenty?

A .- Yes, for a distance of thirty chains.

Q .- What would be the weight of the engine proposed for working the line?

- A .- About eight tons. Such engines have been used for ten years on the ordinary lines of England and Ireland, and they have been used for considerable traffic on the Cork and Bandon Railway. The trains consist of the following stock, all fairly laden :-
  - 1 first and 2 second class carriages, for 58 passengers.

1 third-class carriage, for 40 passengers.

1 horse-box, for 3 horses.

1 carriage truck,

- Q.—What weight would this engine draw at the steepest gradient on each side of the saddle respectively?
  - A.—From the Wairau, about 40 tons (gross weight).

From Picton, about 20 tons.

The weight of the carriages would be one-third of the gross weight.

Q.—Do you consider it more economical to work the line by such an engine or by horses?

A.—Supposing the traffic were limited to one train each way per day there would be a saving of £200 to £300 per annum in using horses. As soon as the traffic was increased beyond that amount, the loss in working horses would increase in proportion to the traffic.

Q.—Would one train per day be sufficient for the traffic?

- A .- No; for the passenger parties should be able to leave and return the same day from either end of the line.
- Q .- Do you consider the present proposed line more advantageous than the former one in proportion to its cost?
- A .- Yes, certainly; on the south side of the saddle the gradient now proposed is far easier; and on the north side the gradient, although steep, will allow of the required traffic being carried on without extra expenses.

Q.-By your report on the deviation from Section 43 to Section 26, near the bend of the Koromike, what is the advantage to be derived from the same?

A .- Throughout that length the saving of the clearing of the bush and earthworks would be about £1,700, and the saving in distance about eleven chains.