

## APPENDIX C.

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### REPORT ON THE RIVERHEAD AND AUCKLAND RAILWAY BY THE ENGINEER-IN-CHIEF,

MADE IN COMPLIANCE WITH SECTION 16 OF "THE RAILWAYS ACT, 1872."

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The ENGINEER-IN-CHIEF to the Hon. the MINISTER for PUBLIC WORKS.

SIR,—

Public Works Office, Wellington, 13th April, 1874.

This line is 22 miles 47 chains long, and unfavourable as to gradients and alignments, the steepest gradient being 1 in 35, and the sharpest curve has a radius of 5 chains. It is intended to connect the railway already made between Kaipara and Riverhead with Auckland.

The latter railway was undertaken by the Province of Auckland in order to open up the country on the West Coast of the province, by giving communication between the head of navigation in the Kaipara River, which flows into Kaipara Harbour, and the corresponding point in the Waitemata River, which flows into Auckland Harbour. The country lying between these points, and through which the Kaipara and Riverhead Railway runs, is not, for the most part, suitable for agriculture, as it consists of a barren white clay which was formerly covered with a kauri forest, as evidenced by the kauri gum still embedded in the soil; the line will therefore have to depend almost entirely on through traffic from the West Coast, which must be small until the country becomes more thickly settled than it is at present; in fact, the Kaipara Railway may be said to have been built rather to develop a trade than to accommodate one already existing. The same may be said of its extension to Auckland. It will give the settlers on the West Coast better communication with Auckland than the Kaipara Railway alone would do; but the traffic over it will be small until the Kaipara country becomes settled.

The principal traffic with the West Coast will, for the present, be in timber; but as there is a long navigation up the Kaipara River, which can only be carried on advantageously in small vessels, it is not likely that any timber will be sent over it except what is required for use in the town of Auckland. The main export will be by sea, as at present.

Between Riverhead and Auckland the country is generally of the same barren character as between Riverhead and Kaipara, but there is some good land at the foot of the Waitakere Range, which is settled; the area is, however, relatively to the length of the line, very small. The few mills and manufacturing establishments along the line are placed either near Auckland, or else in positions which give them easy water carriage, so that very little revenue can be expected from them.

On the whole, I do not think either the Kaipara Railway or the extension of it to Auckland will pay working expenses; but the former having been already made, its usefulness will be increased by the construction of the latter.

The curves and gradients on the Kaipara Railway are still less favourable than on the extension, there being gradients of 1 in 33.

The Hon. the Minister for Public Works, Wellington.

I have, &c.,  
JOHN CARRUTHERS,  
Engineer-in-Chief.