PAPERS RELATIVE TO CONSTRUCTION OF

No. 53.

Mr. STEWART to Mr. COOPER.

Camp, River Pohangina, Napier Track, Manawatu, 14th December, 1870.

SIR,-

I have the honor to report to you that to-day I went through the Manawatu Gorge with a view of seeing the advisability of taking the road and railway line through it, and so obviating the necessity of crossing the dividing range at a considerable elevation.

The southern or left bank of the Manawatu, in the gorge (which, roughly estimated, is five or six miles long), is I think practicable for the line at a small elevation above the river.

The north or right bank is not so good, being more broken by deep gullies and cliffs, particularly in

the western part of its length.

Please communicate this to the Engineer on the Napier side. I make some further explorations, and will be ready to meet and consult with Mr. Weber, about the junction of our works, by the 6th January, if he can do so. Please inform me of place and time.

I have, &c.,

JOHN T. STEWART, District Engineer.

G. S. Cooper, Esq., Under Secretary, Wellington.

No. 54.

Mr. STEWART to Mr. Cooper.

SIR,-

Manawatu, 26th December, 1870. I have the honor to report to you that, on the 15th instant, I went over the range to the Napier side, and next day met Mr. Weber, the Engineer in charge of the road line there. On the 19th he accompanied me through the gorge of the Manawatu to the west side of range. We have agreed that the best line for road and railway is through the Manawatu Gorge, keeping the south bank of the river,

which bank is, as I have already reported to you, the best.

On both the Napier and Manawatu sides of the range, the road line affords no serious difficulty until the main range is reached. By taking advantage of the natural pass through the gorge of the Manawatu, a line across the range, practically level, or rising with the moderate rise of the river bed only, is obtained, and the alternative avoided of going over the Tararua Range on the side to the south, or the Ruahine Range on the side to the north, either involving a rise of some 1,000 or 1,200 feet over the country on the west side.

To accomplish this with practicable grades would involve a length of about seven miles additiona. on a road line over the length of that through the gorge, and a still greater additional length if for a

railway line, besides the permanent objection to severe grades.

Although, therefore, the part of the road line through the gorge will be an expensive work, yet it will be a permanently better line, and the cost will be in a great measure compensated for by the saving of length; and as the rest of the whole line from Manawatu on the West Coast to Napier on the East Coast is over a country which does not necessitate heavy works, it would not seem so objectionable that the comparatively short length through the Manawatu Gorge be of a more costly nature.

The Manawatu line will meet the line from Napier to Wairarapa and Wellington at the east entrance to the gorge, probably near the Maungaatua Stream, which there runs from the north into

the Manawatu River.

G. S. Cooper, Esq., Under Secretary, Public Works Office.

I have, &c., JOHN T. STEWART,

District Engineer.

No. 55.

His Honor J. D. Ormond to the Hon. the Minister for Public Works.

Wallingford, Hawke's Bay, 2nd January, 1871. I have the honor to enclose, under separate cover, Mr. Weber's report to the Engineer-in-Chief SIR.

on the line from Rua Taniwha to the Manawatu Gorge.

A perusal of that report will, I think, satisfy you that the line described as No. 1 is the only practicable line, and I shall hope to get an early authority from you to cause the road works upon that line to be proceeded with. Mr. Weber describes the line to me as really good. The height at the Takapau, where the road enters the bush, is about 900 feet above the sea level, and from there to the Manawatu Gorge, a distance of about thirty-five miles, the fall is about 600 feet, Messrs. Weber and Stewart fixing the height at the upper entrance of the Manawatu Gorge at 300 feet. I mention this to show that the natural facilities, for either road or railroad, of this line are extremely good. The principal difficulties found by Mr. Weber in exploring the line, arose from the gulches running from the Running to the Manawatu River. These chasms were so great anywhere near the Manawatu River. the Ruahine to the Manawatu River. These chasms were so great anywhere near the Manawatu River that the line is forced up to near the base of the Ruahine Ranges. On the line fixed upon there are five of these large gulches to cross, each from 115 to 130 feet deep, and from 4 to 5 chains wide at With the exception of these difficulties, the whole line is easy and good, and most of the road work

In a former communication I advised you that I had called for tenders for forming the road and

felling the bush from Ruahine to the gorge, and received your approval to what I had done.

I enclose the form of notice used, from which you will see that I proposed to divide the work into nine contracts, fell the bush one chain wide, and clear and stump a roadway 20 feet wide. This notice was given on the information then obtainable, and has had the effect desired, as it has drawn attention