SESS II.—1891. NEW ZEALAND.

THE MOKIHINUI AND LYELL ROAD BRIDGES

(MEMORANDUM BY ACTING-ENGINEER-IN-CHIEF RELATIVE TO THE CONTRACTS FOR THE CONSTRUCTION OF).

Laid on the Table by the Hon. Mr. Seddon, with the Leave of the House.

Memorandum from the Acting-Engineer-in-Chief to the Hon. the Minister for Public Works.

Public Works Department, Wellington, 16th March, 1891.

Re Contracts for Construction of Mohikinui and Lyell Road Bridges.

In compliance with your instructions I have the honour to submit herewith a statement of the amounts of the original contracts for these bridges, together with the ascertained and estimated cost of extra works in connection therewith, the specified dates for completion of contract works, and the date on which the Lyell Bridge was completed. The Mokihinui Bridge is not yet

completed.

Regarding the Lyell Bridge, it was found necessary to make considerable alterations in the construction of the piers and portions of the superstructure of bridge, owing mainly to the information supplied by the District Engineer in reference to the nature of the ground in the river-bed at the bridge-site being somewhat inaccurate; the stratum of solid rock having been found to be about 10ft. deeper than shown on the section of the river, and longitudinal elevation of the bridge supplied by the Engineer, which rendered it necessary to increase the height of the central pier, shift its position, and provide for an entirely new class of foundations, as well as make some alterations in the framing of the principal spans of the superstructure, involving an additional expenditure amounting to £5,553 5s. 11d.

In carrying out the Mokihinui Bridge Contract it was ascertained that during very heavy

In carrying out the Mokihinui Bridge Contract it was ascertained that during very heavy floods in the river the current attained an extraordinary velocity, which was estimated to reach nearly thirty miles an hour, and that large trees and logs brought down by the stream were, by coming in contact with the bottom of the river, projected to considerable heights above the surface of the water during floods. It was therefore necessary to increase the length and width of the masonry of the central pier so as to add to its weight and stability, and to raise the whole structure in order to guard against the possibility of floating timber coming in contact with the bridge-framing during high floods in the river. The extra masonry and other works contained in this alteration are estimated to cost £909, and a considerable portion of this extra work is already executed.

WILLIAM H. HALES

William H. Hales, Acting-Engineer-in-Chief.

			Lyell Br	ridge Con	tract.		£		d.
Original contract							8,957	0	0
Addition	s	•••	•••	• • •	•••	•••	5,895	4	4
							$\frac{14,852}{14,852}$	4	4
Less reductions Total cost of work		$\operatorname{ctions} \dots$	•••	•••		• • •	341	18	5
		of work	•••	•••		•••	£14,510	5	11

Date for completion, 17th March, 1889.

Actual date of completion, 10th September, 1890.

Delay, 71\(\frac{e}{7}\) weeks.

Additional time allowed for extras, 65 weeks.

Actual delay on which penalty was computed, 6\(\frac{e}{7}\) weeks.

Penalty for delay, \(\frac{e}{2}\)5 per week.

Amount of penalty incurred, \(\frac{e}{1}\)71 8s. 7d.

Penalty remitted, 22nd December, 1890.

	<i>Tokihinui</i>	Bridge	Contract.		£		d.
Original contract		• •		• • •	4,835	0	0
Estimated cost of extra work	k	• •		•••	937	0	0
Total cost of work					£5,772	0	0
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Date for completion, 13th December, 1890. Penalty for delay, £20 per week. (Contract not yet completed.)

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