

ground, but, on the contrary, the data given in the specifications show conclusively that the department considered the tunnel would be in firm ground; and, acting on these data, we concluded that the department were satisfied that the same would prove firm ground, and accordingly based our tender thereon. We would point out, in addition to the above, that there appears on the drawings a general sectional plan showing a tunnel through soft ground. This tunnel was not adopted by the department. We consider it unfair to state that we are bound by our schedule rates for tunnelling in soft ground, and that we are only to be paid according to that schedule, which was never intended by us to cover such an extraordinary outlay. As to the matter being one of "contractors' risk," you might as well say that any extra material or excavations that have been done, such as the invert extra brickwork in walls and arch, would come under the same heading.

In *re* the extra price for "invert": The schedule does not mention "invert," and we therefore consider we are fairly entitled to the claim made.

In *re* the bolt-ends: We venture to state there has not been a bridge built in New Zealand in which there are bolts with over-screws on the ends that have not been welded; and your action, if insisted upon, would mean that the bolt-ends will be left on our hands.

We consider that the treatment we are receiving, in view of the extraordinary circumstances attending the contract, as most harsh and arbitrary, and we again appeal for a more favourable consideration of the position and our contention.

We have, &c.,

JOHN McLEAN AND SON,

Contractors, Makarau Section, Helensville Northwards Railway.

The Resident Engineer, Public Works, Auckland.

EXHIBIT No. 11.

MEMORANDUM for the ENGINEER-IN-CHIEF *re* Helensville Northwards Railway, Makarau Contract Damage by Flood.

On the 23rd instant one of the most severe rain-storms ever experienced passed over this contract. Probably 5 in. or 6 in. of rain fell within twenty-four hours. As a result several severe slips have occurred. On the completed portion, which has the rails and ballast on, and which has stood all the previous winter rains, slips have occurred as follows:—

43 miles 52 chains: Approximate quantity, 100 cubic yards. Cutting has slipped on west.

43 miles 54 chains to 43 miles 55 chains 50 links: Approximate quantity, 800 cubic yards. Bank has slipped with solid base.

43 miles 73 chains to 43 miles 73 chains 50 links: Approximate quantity, 800 cubic yards. Bank has slipped with solid base.

43 miles 57 chains: Approximate quantity, 50 cubic yards. Cutting and signs of a lot more to come.

44 miles 8 chains: Approximate quantity, 100 cubic yards. Cutting has slipped in the old place.

44 miles 30 chains to 44 miles 32 chains: Approximate quantity, 200 cubic yards. Cutting has slipped off rock.

Then, on the other side of the tunnel, there are slips which have come in during the previous winter rain and this gale:—

44 miles 63 chains to 44 miles 66 chains: Approximate quantity, 3,000 to 4,000 cubic yards. Slipped in all round towards mouth.

44 miles 79 chains: Approximate quantity, 200 cubic yards. Bank has slipped.

45 miles 13 chains 75 links: Approximate quantity, 100 cubic yards. Slipped on west bank.

45 miles 18 chains to 45 miles 25 chains: Approximate quantity, 200 cubic yards. Cutting slipped on east.

45 miles 31 chains to 45 miles 35 chains: Approximate quantity, 600 cubic yards. Cutting slipped on east.

45 miles 39 chains to 45 miles 40 chains: Approximate quantity, 100 cubic yards. Cutting slipped on east.

45 miles 43 chains: Approximate quantity, 150 cubic yards. Cutting slipped on east.

45 miles 63 chains: Approximate quantity, 70 cubic yards. Cutting slipped on east.

46 miles 8 chains: Approximate quantity, 70 cubic yards. Cutting slipped on west.

45 miles 76 chains: Approximate quantity, 100 cubic yards. Gap cut on bank by water.

Also, the big bank on south of tunnel at 44 miles 17 chains is constantly setting and slipping away, and it does not seem likely that the tunnel material will ever form a substantial bank.

The drive through the fall in the tunnel is being enlarged to form a bottom heading, and then a top heading will have to be driven. It is going on slowly, but, so far, safely.

CHAS. R. VICKERMAN, Resident Engineer.

Public Works Office, Auckland, 1st March, 1893.

EXHIBIT No. 12.

The Under Secretary for Public Works.

Public Works Office, Auckland, 9th January, 1896

MAKARAU TUNNEL.—I have to report that another difficulty has arisen at this tunnel, at the north face, eastern wing wall. The wings were put in about a month ago, with an invert, as the ground was