

746. And you recommended the construction of a breakwater with rubble-stone?—Yes.

747. Have you any reason to suppose that proper rubble-stone is not obtainable now?—I have no positive information about it.

748. Do you know what steps were taken to prove whether rubble in sufficient quantities could be obtained or not?—I only know by reading the report made by Mr. Rees, the then engineer to the New Plymouth Harbour Board, that he made a drive into the Paretutu, the proposed quarry for the stone, and that the making of that drive proved to him that the stone is not suitable.

749. After the drive was constructed, do you know whether a blast was put into the quarry?—No; I do not remember that that was done.

750. At the time you reported and recommended the use of this stone, you had, I presume, made some inspection of the quarry?—Yes; we inspected the hill and the large masses of stone lying at its base, and apparently similar stone lying on the beach in the vicinity, which led us to infer that the mass of the hill would be suitable for the breakwater.

751. And beyond Mr. Rees's report you have no information to warrant you in any change of opinion?—Not beyond that.

752. Do you concur in the accuracy of Sir John Coode's estimates for the cost of construction of the first design?—I never went into that at all.

753. You never considered it?—No.

754. That rested with Mr. Carruthers?—No; it rested with Sir John Coode. His prices were based upon information he got in the colony.

755. And you were never called upon, either yourself or Mr. Carruthers, to verify?—No.

756. Is the work now being carried on in Taranaki subject to Government inspection of any kind?—Not that I am aware of. If it was, I think I should know.

757. You are aware, no doubt, that Sir John Coode has prepared amended designs for the construction of a portion of the work in concrete?—The amended design was prepared on the representation of the engineer (Mr. Rees) that the rubble was unsuitable.

758. Have you been called upon to verify Sir John Coode's estimates for the second design?—I cannot say that I have.

759. Have you done so?—No.

760. You have not in any way checked those estimates?—I cannot say that I have.

761. Then, in submitting Sir John Coode's amended design for the approval of the Governor in Council last year, were you not called upon to support the application by any estimates?—I cannot say exactly how it was done, but I think it was in general terms. My reports I generally confine to the kind of work—as to its being such as can be carried out, irrespective of cost; and, at the time these new plans were submitted to the Governor in Council, they were accompanied, as far as I can remember, by elaborate reports from the engineer (Mr. Rees), to show that Sir John Coode's estimates of the cost of concrete were based upon wrong data—that is, as to the cost of cement, price of labour, and materials—and that, therefore, although Sir John Coode thought the concrete work would be more expensive, he (Mr. Rees), taking the lower price of materials and labour into account, endeavoured to show that the work could be carried out at very much less cost than Sir John Coode estimated.

762. To whom did Mr. Rees make these representations?—They were made to the Harbour Board, and then forwarded to the Government, I suppose: that would be the routine.

763. They forwarded their application to the Government, based on Mr. Rees's estimates?—Yes; Mr. Rees's estimates would accompany it.

764. And you, as Marine Engineer of the colony, were not called upon to say whether you concurred with Mr. Rees's or Sir John Coode's estimates?—I do not remember that I was; I should have to refer to the papers.

765. You are aware that the New Plymouth Harbour Board are at present limited, in their authority to borrow, to £200,000?—I understand that is the extent to which they are supposed to go—the extent of their authorized powers.

766. Are you aware that they only realized £185,000 as the net proceeds of the loan?—No; I am not aware.

767. Well, having realized £185,000 as the net proceeds of the loan—and having expended £72,514 before commencing the actual construction of the breakwater, do you think they are in a position to complete the work to *Y Y*, according to the amended design of Sir John Coode, with the balance of the funds at their disposal—£113,000?—I should not like to give an answer to that question; I have not information enough to go upon.

768. Have you not seen the details of the design?—Yes. Having £185,000 to spend, necessarily whatever they did would be included in that, and a sum must be spent in plant and opening the quarry; therefore I cannot say whether the balance would finish it or not.

769. Will you consider the plans and the amount of concrete required for the construction of the breakwater, and state your opinion?—That would only be in the shape of an estimate from me—only an opinion—I have nothing whatever to guide me as to the cost. The engineer, or some one more connected with the work and what has been done, would be better able to give that information.

770. The breakwater to *Y Y* includes about 98,000 cubic yards of concrete. Do you think, with your knowledge of the character of the work, and as a marine engineer, that they would be able to put down 98,000 yards of concrete at a cost of £113,000, exclusive of preliminary expenses?—That is a question I should not like to answer off-hand.

771. Will you furnish an answer to that question?—I can furnish an answer and give my opinion after obtaining more information.

772. Are you aware what similar works of the kind have cost at Timaru and Oamaru per cubic yard?—I can only speak from memory. I do not know what it cost at Timaru at all. At Oamaru it used to cost 40s. at one time: so I was told by the engineer, Mr. McGregor.

773. I find, in your evidence before the Committee of the Legislative Council, that you speak of the estimated cost of the portion of the breakwater now proposed as being £160,000. That, I presume, referred to the rubble breakwater?—The questions asked at last year's Committee were of such an