

(No. 108.)



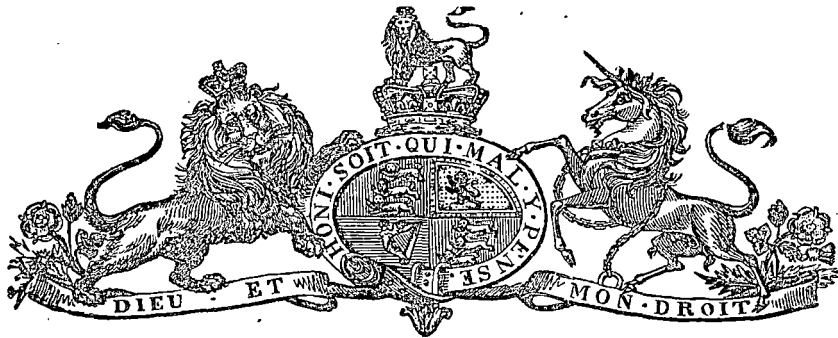
1862.

T A S M A N I A.

S O R E L L C A U S E W A Y .

R E P O R T O F C O M M I S S I O N E R S .

Presented by Mr. Chapman, and ordered by the House to be printed,
19 September, 1862.



To His Excellency Colonel THOMAS GORE BROWNE, Companion of the Most Honorable Order of the Bath, Captain-General and Governor-in-Chief of Tasmania and its Dependencies.

MAY IT PLEASE YOUR EXCELLENCY.

THE Commissioners appointed to enquire into the formation and progress of the Sorell Causeway, having duly acquainted themselves, by examination and inspection, with the proceedings of the Trustees of the said Work, and the manner in which the undertaking has been carried out, and having given a careful consideration to the subject in all its bearings, have the honor to report, in compliance with Your Excellency's Command, the results of the Enquiry, together with such observations and suggestions for future guidance as the Commissioners have deemed it desirable to subjoin for Your Excellency's information.

The Commissioners, with the view of rendering their Report as clear and comprehensive as possible, and in order to avoid the confusion which the variety and multiplicity of the details that it has been found necessary to introduce would entail, have resolved to divide it into the following heads, by which each branch of the subject will be more conveniently treated.

- 1st. The Proceedings of the Trustees, and their relations with the Contractor.
- 2nd. The Plans and Specifications.
- 3rd. The progress and formation of the Work.
- 4th. General observations and suggestions.

1. The Proceedings of the Trustees, and their relations with the Contractor.

The Commissioners have given a prominence to this section of their Report, believing that it provides the most suitable introduction to a perfect knowledge of the whole question. They propose, therefore, to give a short sketch of the transactions of the Trustees, and of the manner in which they carried out the duties assigned to them.

The Trustees were elected under the Act of Council, 24 Vict. No. 27, on the 10th December, 1860, and appear to have accepted Martin M'Loughlin's Tender, for the construction of the Causeway, on the 28th January, 1861. Five other Tenders were received by the Trustees, one of which was lower than that of Mr. M'Loughlin; but the Commissioners have not considered it within their province to re-open the question of whether the Trustees were justified in the course that was taken, more particularly as the sole power of selection was conferred by the Act on that body; and the Government of the day was not made acquainted with the reasons which induced the Trustees to accept M'Loughlin's Tender until a subsequent period.

The Commissioners therefore accept the decision of the Trustees in this matter, and feel it their duty to confine themselves solely to the consideration of the several circumstances in relation to the work which transpired afterwards.

The Contractor commenced operations on the 10th April, 1861, but the agreement between him and the Trustees was not signed until the 22nd August, 1861. This delay arose from the difficulty of obtaining the required sureties for the due completion of the work. No payments, however, were made to him previous to the latter date—the work being carried on at his own risk. Mr. Frederick Thomas, C.E., who had previously designed the plans, was appointed by the Trustees to superintend the construction of the Causeway; and, according to the agreement, was the sole medium of communication between the latter body and the Contractor.

The certificates of the Engineer were also to be considered as conclusive in deciding the claims of the Contractor to an instalment; and several payments appear to have been made, according to the evidence of Mr. Potter the Secretary to the Trustees, on the advice of their Solicitors, though they were dissatisfied with the certificates, and the manner in which the work was performed. Allusion has been made to this feature in the agreement,—placing it out of the power of the Trust to interfere except through their Engineer, and being obliged to accept his certificate for the work performed,—as it will assist in elucidating some of the subsequent transactions between the Trustees and their officers.

The Trustees appear to have been dissatisfied with the material of which the Causeway was being constructed at an early period, and verbal objections were made to Mr. Thomas on the subject. On the 11th October, 1861, a letter was addressed to the latter gentleman, specifying the particular faults complained of; but the Contractor is stated to have followed the same course as before. These differences led Mr. Thomas to send in his resignation on the 3rd February, 1862. The Trustees, however, refused to receive it, and dismissed him on the 19th of the same month. His successor, Mr. Gale, was not appointed until the 8th March. During the interval that elapsed the Works were carried on by the Contractor. According to the evidence there appeared to have been no proper superintendence on the part of the Trustees between the date of Mr. Thomas's resignation, on the 3rd February, and the arrival on the Works of Mr. Gale's Clerk, on the 25th March. During this period a large number of piles were driven; but it does not appear that any steps were taken to see that the work was properly performed. No portion of it required more careful supervision; and for this reason the Commissioners cannot acquit the Trustees of blame, as, however ignorant they may have been of practical Works, their previous objections to the manner in which the Contract was being carried out should have forced on their minds the necessity of exercising some check on the Contractor. This was not done; and it has led to doubts being expressed as to the soundness of the work, and its unfitness for the purpose to which it is applied.

Mr. Gale did not give satisfaction to the Trustees, in consequence of his failing to carry out their wishes, and neglecting to enforce the conditions of the Contract. He was dismissed on the 21st June, 1862; and was succeeded by Mr. Carmichael, on the 23rd of the same month. The latter-named person held the office of Superintending Engineer until the stoppage of the Works, owing to M'Loughlin's Insolvency, on the 11th July following.

During the whole period, from the signing of the Agreement to the last-mentioned date, continual dissatisfaction was expressed by the Trustees as to the manner in which M'Loughlin was carrying out the Contract. The payments, however, of the several instalments were made with tolerable regularity, on the Certificates of the Engineers.

The following Account will show the several amounts that have been received by the Contractor during the progress of the Work:—

1861.	£
August 26.—1st instalment	500
September 7.—2nd instalment	500
October 26.—3rd instalment	500
1862.	
January 1.—4th instalment	500
February 1.—5th instalment	500
May 28.—6th (Loan).....	500
June 27.—7th instalment	500
<i>Total Payment</i>	<u>£3500</u>

Five payments were made during Mr. Thomas's tenure of office, although Mr. Potter states in his examination that the first two certificates were not considered satisfactory. During Mr. Gale's superintendence, the sixth instalment was paid in the shape of a loan, on the advice of the Solicitors to the Trust, and in order to prevent the stoppage of the works. The receipt of this sum by the Contractor was not to be held as cancelling any objections the Trustees might hereafter raise with respect to the work; but the Commissioners regret that, under the circumstances of such serious objections having been taken previously, and the Contractor having throughout evinced a disposition to carry out the contract at variance with the agreement, and also as they were under no obligations to pay this amount in the absence of a certificate, more decided steps were not taken at this juncture to carry out the work in strict accordance with the terms of the contract, or a reference made to the Government as to the course the Trustees should have pursued in a matter where public and local interests were involved.

There is no question but that the Trustees have been placed in a difficult position from the first. Anxious to have the work completed, they were willing to pass over the several deficiencies com-

plained of, fearing that the District would be a loser by a change of Contractors. This, although it may explain, does not alter the fact that M. M. Loughlin appears to have been specially favored throughout, from the acceptance of his Tender, to the granting the sixth instalment in shape of a loan.

A return of the receipts and expenditure of money by the Trust is appended to this Report for Your Excellency's information.

In concluding this branch of the Report, the Commissioners desire to express their satisfaction at the admirable manner in which the Books and Accounts of the Sorell Causeway Trust have been kept. The careful register of their proceedings has proved of great assistance in enabling the Commissioners to make themselves conversant with all matters concerning the Trust.

2. The Plans and Specifications.

The plans and specifications under which the Contract for the construction of the work was taken were prepared by Mr. Frederick Thomas, C.E., who was selected by the Trustees for the purpose.

A careful scrutiny of the plans has enabled the Commissioners to form the opinion that much of the misunderstanding that has arisen, with respect to the work, between the Engineers, the Trustees, and the Contractor, has been occasioned by the existence of discrepancies and ambiguities in the documents referred to; and that sufficient care was not taken at the outset to determine their congruity and practicability by the Officer appointed by the Government to revise them.

In the first place, the Commissioners have to draw Your Excellency's attention to the fact that no provision has been made either in the plans* or the agreement for any approaches to the pile bridging. The transverse section of the Causeway shows the height of embankment to be carried four feet above high water; whilst the elevation and detail drawings of the timber framing make the roadway seven feet three inches above the same level, and three feet three inches higher than the Causeway. In the agreement, the height of four feet above ordinary high-water mark is applied to the Causeway, and has been understood by the Trustees as being equally applicable to the timber framing. The piles appear to have been driven in accordance with this view, so that the roadway of the bridge will be level with that of the Causeway. The Trustees expressed themselves to the Commissioners on the Works as being satisfied with this procedure, owing evidently to the misconception which the use of the term "four feet above ordinary high-water mark," as applied to the Causeway in the Agreement, has tended to produce.

In a subsequent portion of this Report Your Excellency's attention will be directed more particularly to this point, and its effect in impairing the value of the work; but at present the Commissioners have only to refer to the discrepancies that apparently exist between the plans and the agreement, and which the Contractor has taken advantage of without the Trustees, on their own admission, being aware of it. The plans and agreement being taken conjointly, which is strictly according to the terms of the contract, leaves no doubt in the Commissioners' minds but that the Contractor was bound to carry out the work in conformity with the plans, leaving the approaches above referred to as additional work for which provision might hereafter be made.

There is another important difference between the original specification and the agreement which might have the effect of materially modifying the plan of the proposed work. In the specification "high-water mark" is specifically mentioned as a defined point in relation to certain portions of the structure; whilst, in the agreement, "ordinary high water mark" is the term used. The addition of the word "ordinary" gives an indefiniteness to the expression, which would be likely to prove a source of dispute, though both may have the same meaning. It does not appear that any steps were taken, either by the Trustees or their Engineer, to determine the proper level previous to the commencement of the work. Mr. Falconer, the Director of Public Works, stated in his examination, that he specially suggested that the Trustees should take this course as a preliminary measure.

The Commissioners do not consider that any comment on the particular design in carrying out the work is necessary. They have solely to deal with those matters to which the failure of carrying out the contract in a proper manner, and the misunderstanding that has occurred, can be traced. They accept the plans as being already approved; but they regret that the discrepancies, which have proved so injurious to the undertaking, should not have been detected at the time the Agreement was drawn up.

* In the plans the height of the Causeway at the junction of the timber bridging is not entered, nor the point fixed for the spring of the slope of the approaches.

3. *The Progress and Formation of the Work.*

The Commissioners have to report, for Your Excellency's information, that about one-third of the work may be estimated to be done. The sum of £3500 having been paid by the Trustees to the Contractor, and the seventh instalment having been based on the certificate of the Engineer, the aggregate payments would represent the value of £4666,* or 25 per cent. above the amount paid, which is about the proportion above alluded to.

Three hundred piles have been driven; and the embankment from the Bluff, and on both sides of Medway Point, extends to a total length of about twelve hundred yards or thereabouts. Besides this there has been a large quantity of timber and stone collected for the use of the work.

The Causeway, so far as it has been carried out, does not appear to be composed of the proportion of stone and clay required in the agreement; viz.—one part of the latter to five of stone. This departure from the terms of the Contract has been alluded to in a previous portion of this Report, and was mainly the cause of the differences that arose between the Trustees and their Engineers. The height to which the Causeway is carried seems to be in accordance with the plans; but in consequence of the quality of the material used, and the Contractor failing to carry out the stone facing simultaneously with the forcing, a very much larger expenditure than that contemplated will be required to make the work sound and durable. A large portion of the Causeway has spread out at the base, owing to the lightness of material, and thereby offers a serious obstacle to the building of the sea facing and berm, which should rest on a more firm basis than the sedimentary deposit, above described, affords. The sea facing and berm is a most important portion of the work; but it seems to have been deemed of secondary importance, judging of the manner in which the Contractor carried out the embankment. The Causeway will have to be widened in many places, so as to afford a sound foundation for the berm, and as a rule an easier slope than one in one will have to be resorted to. The quality of the material used is not of such great moment in shallow water, if properly protected by the facing, as it would not be subjected to any serious waste after the first settlement.

Judging of the manner in which the work has already, in an unprotected state, withstood the effects of the weather, and the heavy wash of the sea during the late gales, the Commissioners believe that permanence might reasonably be expected by the addition of the sea facing. The waste of material since the stoppage of the works has been caused more by rain than exposure to the waves or currents. But, although the work, as before stated, in shallow water might be considered as durable, the advantage of having the best material cannot be too highly rated. And the Trustees were fully justified in their continual protestations against the use of inferior stuff in the Embankment.

The Piling, which is also one of the most important portions of the work, has not been carried out in accordance with the Plans. A careful examination by the Commissioners leaves no doubt on this point. As a rule, they do not exceed one foot in height above high water, which will have the effect of reducing the level of the Roadway of the Bridge 3 feet 3 inches below that shown on the Plans. The latter are definite on this point, by giving a space of 5 feet between high water and the longitudinal beams of the platform; whereas, in the work as carried out by the Contractor, there would be only two feet of water-way, and the struts and walings would be almost totally under water, which was never contemplated.

The Commissioners are of opinion that the work cannot be carried out in the manner described with any hopes of its possessing stability or permanence. The heavy current in the Channel, and the wash of the sea during high winds, will have to be provided for by allowing ample water-way, and a minimum of resistance,—neither of which essentials will be possessed by the structure if carried out with the Piles as they are at present driven.

The stone used in the work is not so good as might be desired, but it appears to improve as the excavations at both Medway Point and the Bluff have been extended. This will enable the forcing to be carried out in a better manner as the water deepens and the current increases.

The Commissioners have no hesitation in expressing their opinion that the terms of the Agreement have neither been complied with either in the construction of the Causeway or the piling, and that it will be impracticable to build the bridge, in accordance with the plans, unless very much larger piles are used. It will be a subject for consideration, therefore, as to the best means of utilising the work, as it stands at present, by a modification of the drawings under which the Contract was taken.

4. *General Observations and Suggestions.*

The Commissioners, in dealing with this Section of the Report, have first to bring under Your Excellency's notice the fact that the many difficulties with which the Trustees were beset in their

* M'Loughlin's Tender was £13,736.

transactions with their own Officers and the Contractor, can be mainly traced to the circumstance of their not having reserved to themselves any right of interference in the work, except through their Engineer. If the Government had exercised any supervision they would have been in a better position, as they might have applied through them to have the faults they complained of remedied; and it is probable that there would have been no complaint with respect to the manner in which the work was carried out.

The exercise of supervision by the Government would have afforded the Trust a means of interfering in cases where their representations were disregarded by their own Officers; and as the Grant in aid bore a large proportion to the total cost, there would have been sufficient grounds to sanction this arrangement.

For these reasons the Commissioners would suggest that the Government should retain the right of supervision in the future conduct of the undertaking; and that the Certificate of the Engineer of the work be countersigned by a person appointed by the Government, who shall also furnish an estimate of the work done at the same time.

The Commissioners would also recommend, in consequence of the faulty manner in which the Contract has been carried out, that M'Loughlin's Agreement with the Trust be cancelled, in accordance with a clause to that effect contained in it; and that the plans and specifications be amended, and fresh tenders invited for the completion of the Causeway.

Dated at Hobart Town this 17th day of September, 1862.

W. ALCOCK TULLY.
THOS. GIBLIN.
C. M. MAXWELL.
A. G. WEBSTER.

RETURN of RECEIPTS and EXPENDITURE on account of the SORELL CAUSEWAY.

Cr.	£	s.	d.	Dr.	£	s.	d.
Amount received in Private Subscriptions	4001	10	3	Cash paid Contractor	3500	0	0
Government Grant in Aid.....	2000	0	0	Incidental Expenses	522	17	1
				Balance in Bank of V. D. Land in Cash and Bills	1978	13	2
					<u>£6001</u>	<u>10</u>	<u>3</u>
					<u>£6001</u>	<u>10</u>	<u>3</u>

W. ALCOCK TULLY.