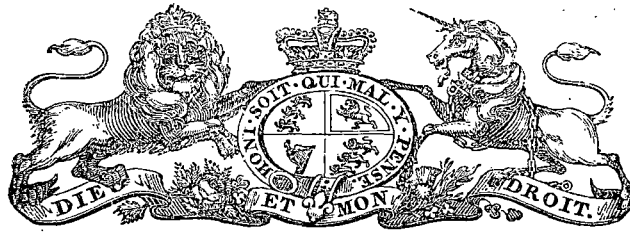


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1889.

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PARLIAMENT OF TASMANIA.

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GREEN PONDS AND CHUDLEIGH RAILWAYS:

MEMORANDA AS TO IMPROVEMENT OF LINES.

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Laid upon the Table by the Minister of Lands, and ordered by the House of Assembly to be printed, January 23, 1889.



## GREEN PONDS AND CHUDLEIGH RAILWAYS.

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### *MEMORANDA as to Improvement of Lines.*

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#### *Green Ponds Railway.*

Improvement of Class of Line, £12,000.

#### *Chudleigh Railway.*

Improvement of Class of Line, £2000.

THE Engineer-in-Chief having at various times strongly reported upon the advisableness of making these lines of the same class as the Mersey and Deloraine Lines, and the General Managers of the Government and Main Line Railways respectively having, in the very strongest manner, also advocated the same thing, the above amounts are proposed for the purpose of carrying the recommendation into effect. Parliament, when discussing the votes for light tramway lines, provided only for a heavier class of rail. By keeping an uniform character of Railway in the Colony *all* the rolling stock will be interchangeable—instead of wagon stock only—which would not be the case were some of the lines constructed of the tramway class as originally proposed.

It must be understood that the above estimates are for the alteration if sanctioned at once. Any alteration after present contracts are completed will, as a matter of course, cost considerably more than if made at once.

It is absolutely necessary that a prompt decision be given, with a view to prevent contractors being instructed before the works are too far advanced.

For further information see Engineer-in-Chief's various Reports to Parliament. (Epitome herewith.)

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*Tasmanian Government Railways,  
General Manager's Office, Launceston, 15th November, 1888.*

MEMORANDUM FOR HON. MINISTER OF LANDS AND WORKS.

Light Lines, and Specially designed Light Stock.

REFERRING to our recent conversation, and to my correspondence on this subject, I beg leave to suggest that the matter be dealt with promptly.

FRED. BACK.

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*Tasmanian Government Railways,  
General Manager's Office, Launceston, 15th November, 1888.*

SIR,

FURTHER to my telegram of even date, I now beg to hand you copy of my communication of 11th September.

The experience of all the Colonies is so very strongly in opposition to the character of the lines now being constructed that I venture to say that, unless an alteration is agreed to, the expense of working and maintenance will be out of all keeping with the revenue earned.

In the case of the Brighton Line, it will not be possible to run Main Line Excursion Trains from Hobart, and as our supply of Stock will only be sufficient for ordinary traffic, all holiday excursions will have to be abandoned.

There is much to be said on the subject generally, but I fear that I have already written at a length which may be wearisome.

If you think it desirable I shall be glad to go more fully into the matter at an interview.

I have, &c.

FRED. BACK, *General Manager.*

*The Hon. the Minister of Lands and Works.*

*Tasmanian Government Railways,  
General Manager's Office, Launceston, 11th September, 1888.*

SIR,

BEFORE dealing with the question of new stock for the Brighton and Chudleigh Lines as referred to by the Engineer-in-Chief in his correspondence minuted to me by you on the 20th and 30th ultimo, I beg leave to urge the importance of altering the character of the lines about to be constructed.

I learn that both lines are to have 10 feet cuttings, 12 feet banks, and 4½ inches of ballast. Any professional man who has had experience of this class of line will condemn it at once. In Queensland, it was tried by Mr. Ballard, then Engineer-in-Chief, with the result that the lines had to be reconstructed. In New Zealand the experience was similar. To reconstruct lines under traffic costs much more than it does to complete the work at the outset.

I am so very decided in my opinion that a grievous mistake is being committed in the selection of the class of line under reference, that I venture to suggest that you obtain the opinion of others who are acquainted with light lines. In this country we have Mr. R. C. Patterson, Mr. C. H. Grant, Mr. M'Cormack, and Mr. Hales, all conversant with light lines. The latter gentleman was engaged in construction work in New Zealand, when a trial of a class of line similar to the Brighton and Chudleigh Lines was made, and the scheme abandoned. In Queensland, Mr. Stanley would be able to give invaluable advice, as he has had a long experience in reconstructing lines too lightly constructed at the outset.

In the case of Chudleigh Line, I anticipate if the line were constructed of similar character to the Mersey or Derwent Valley Lines a very large saving in working expenses could be made. Instead of, as suggested by the Engineer-in-Chief, importing special engines, the traffic could be worked with the engines and men engaged on the midday run between Launceston and Deloraine.

In the case of the Brighton Line, a saving of one locomotive could be effected at least. The proposal to run 18 ton engines on the Brighton Line, where there are long grades of 1 in 40, does not recommend itself. To my mind it would be a serious mistake to do so.

As to the cost of altering the class of construction, this would not be great. It will probably be found that in both votes there is a sufficient margin to meet the expense.

It occurs to me that when Parliament insisted in altering the estimate of the Engineer-in-Chief, so as to provide 40 lb. instead of 30 lb. rails, it must have been with the view to keeping a uniform class of line. There are many reasons to be advanced in favour of my views, not the least being the facility for interchange of rolling stock, and the retention of one type of locomotive.

I have, &c.

FRED. BACK, *General Manager.*

*The Hon. the Minister of Lands and Works, Hobart.*

*Tasmanian Government Railways,  
Engineer-in-Chief's Office, Hobart, 15th November, 1888.  
"Light" Lines.*

SIR,

I HAVE the honor to submit for your consideration extracts from various Reports of mine, from time to time, since 1885, all bearing upon the advisability of constructing the ordinary types, at all events for Green Ponds Railway and for the Chudleigh Railway.

My reason for this recommendation are given in the extracts referred to, and I may further point out that these are based upon—

1. The fact that nearly everything has been provided to this end already with a view to having *no reconstruction*, but additions only : *e.g.*, Parliament provided for rails that should be fit for the better line when wanted, culverts are made long enough, and bridges are made fit for the better line. Fencing throughout, and accommodation works are provided as for the better line.
2. The small present extra cost as compared with future cost of the work required, which latter may be taken at from twice to three times that of the former.
3. I estimate the present extra cost at about *ten per cent.* only on the votes.
4. In case of Chudleigh line, the General Manager has agreed to dispense with engine and carriage stock, and this excess cost of 10 per cent. will be reduced to about £1000 in consequence.
5. In case of Green Ponds line the extra money would only be about £12,000, and, as far as I can ascertain all present liabilities, there is no existing excess on the approximate sum voted.

Although the works have been commenced they are not yet far advanced, and the comparatively small change, which I would again advocate even now, would not only leave the Contractors unaffected in any prejudicial way, but give eventual satisfaction to all. The difference in cost is too little to make a different type of line advisable.

I have, &c.

J. FINCHAM, *Engineer-in-Chief.*

*The Hon. the Minister of Lands and Works.*

*EXTRACTS from various Reports, &c. of the Engineer-in-Chief as to the Class of several of the Lines  
which were authorised by 49 Vict. No. 41, 1885.*

The lines are of a "light" character, intended for speeds of 12 miles per hour, and to be worked at present as agricultural or omnibus lines. The engines and carriages will be of a light description, and train loads will be limited, but the wagon stock will be of the standard Government type, and be interchangeable with the Government stock or that of the Main Line Company in order to avoid any transhipment charges in freight of goods.

House of  
Assembly Paper  
No. 126, Session  
1885, pages 4 and  
5.

But the character of the lines should be made thoroughly clear, and the work of first-class lines should not inconsiderately be demanded from them by the public, neither should they be saddled with costly working expenses.

Particular attention is drawn to the fact that items A. B. C. (Green Ponds, Chudleigh, and Sorell Lines) are estimated for light lines, capable of an average speed of about 12 miles an hour, and that they are designed to partake of the nature of steam tramways, and will be inferior in speed and carrying capabilities to the Mersey, Fingal, and other lines.

Attention again called to above-mentioned Paper No. 126, 1885.

These estimates included a special provision of £10,000 authorised to cover cost of increased weight of rails for the Green Ponds, Sorell, and Chudleigh Lines, but at the same time the Act of Parliament makes it compulsory for them to be fenced throughout, which will increase the cost and require further incidental expenditure for accommodation works, probably to extent of another £10,000. The heavier rails and the fencing must inevitably lead to demands from the public for the same advantages that are afforded by such lines as Derwent Valley, Fingal, &c., and I therefore submit for consideration whether the Green Ponds and Chudleigh Lines should not be so completed as far as funds will allow, and the Sorell Line, which is unconnected with the general railway system, left as a line of the cheaper class. In the case of the Green Ponds and the Chudleigh Lines, an average of £5000 per mile would take the Green Ponds Line to Melton, and an average of £4000 per mile would take the Chudleigh Line to Chudleigh. Both these estimates would, I think, suffice.

Public Works  
Report, 1886,  
House of  
Assembly Paper  
No. 66, page vi.

I referred to this matter at some length in my evidence before the late Royal Commission. See answer to Question 3941.

Extract from answer to Question 3941, in evidence given before Royal Commission on Railways and Public Works. See page 153 of Report H. of A. Paper No. 64, 1886.

I was asked specifically for estimates for light agricultural lines. I made approximate estimates for such lines, stating that I proposed to use 30 lb. rails. I thought this a guarantee that no attempt would be made to work the lines with the ordinary speed and stock; but Parliament objected to the 30 lb. rails, and included a provision for increasing the weight to 40 lbs. At the same time, although I stated that the line would not be fenced, the Act was passed compelling the erection of fencing. I have now to provide not only for the cost of fencing, but for the incidental cost of erecting crossing-gates, cattle-creeps, &c. that would have been avoided. Moreover, I am afraid that the adoption of the 40 lb. rail will eventuate in my being compelled to complete the line as an ordinary line, without having adequate provision for such. I have called the attention of the Minister of my Department to this matter in an official report.

Public Works Report, 1887, H. of A. Paper No. 65, page v.

I beg to refer you to my special remarks in Paper No. 66, House of Assembly, 1886, page 6, with regard to the Green Ponds, Sorell, and Chudleigh lines, which I hoped would have called forth some authoritative expressions of opinion in Parliament for my guidance in completing the final estimates and preparations.

The position is, shortly, as follows:—

1. We are committed to lines of a better class than those for which approximate estimates only were given, and but slightly inferior in character to our best lines; the estimated difference before construction being £419 per mile for Green Ponds, £335 per mile for Sorell, and £300 per mile for Chudleigh,—while after construction this amount will be more than doubled.
2. I fear that the public, having become used to a certain speed in travelling upon Main Line and the Government Railways, will be dissatisfied with that projected for these new lines; and their inevitable subsequent conversion will be attended with excessive cost, as compared with what it would be if done in the first instance.

I therefore advise that I may be authorised to complete the Contracts for the Green Ponds and Chudleigh Lines upon the standard types (as there are no heavy works on either line), and that tenders for construction be divided into sections to allow of their partial acceptance within the funds voted for the lines, as suggested in the Paper above referred to (H. of A., 1886, No. 66, p. 6).

Extract from letter to the Minister of Lands and Works, dated 6th April, 1888, re Green Ponds line.

Parliament voted extra money for heavier rails only, and I have had Contracts prepared for a railway which will only require extra earthwork and ballast, and some additional accommodation at stations to make it equal to any of our Lines, at an additional cost, if done now, of about £12,000.

Extract from letter to Minister of Lands, re Green Ponds line, dated 28th May, 1888. Not approved.

I beg to point out that, in order to call for Tenders as suggested, the plans and quantities will be arranged for the lower class of Line with slow speeds, as authorised by Parliament, with the additions made during the passing of the Bill.

If particulars as indicated are submitted to tenderers, I beg to request your authority to attach a special note to the effect that the Government may enlarge the works to such extent as will allow of increased capabilities for traffic and speed, without reference to any condition of Contract relating to limitation of the work.

Endorsement by Engineer-in-Chief on last-mentioned letter.

The heavier rails ordered by Parliament, with provision for fencing throughout, and the accommodation works incidental to division of the properties by fencing, will go so far to alter the character of the Line from one with 30 lb. rails and only partially fenced, and leave comparatively so little to do to make the better class line, that I ventured to say the Department was committed to the latter, as I considered that the public would not tolerate the slow speed on the improved lines.

Endorsement on letter of the Manager, dated 11th Sept. 1888.

The work is planned so that *additional* excavation, ballast, and station work will convert the Line to the higher class. The Manager is correct in saying that the cost of these additions will be much greater hereafter than now.

I have so frequently advocated the same thing as proposed by Mr. Back—not on ground of traffic demands, but because of the vexation and cost of altering the character of the Line after it is opened, and the comparatively small extra cost now—that I need not add more than to say that I believe this alteration will be forced on the Department sooner or later.

*Tasmanian Government Railways.  
General Manager's Office, Launceston.*

Chudleigh Line.—Green Ponds Line. Your Memo. of 19th November.

SIR,

I BEG to acknowledge the above, and observe with pleasure that it has been decided to improve the character of the Chudleigh Line to enable interchange of rolling stock.

I note your instruction as to my preparing order for light rolling stock for Green Ponds Line.

Before giving effect to this instruction, I beg permission respectfully to place on record a final protest against the proposal to purchase light rolling stock, as, in my opinion, it is unwise in the extreme to order a class of locomotive which will, in a few months, have to be replaced by a better type, when the light stock will be thrown on our hands and become almost valueless.

I have gone very fully into this matter in my correspondence with you, more particularly in my letter of 11th September. I note in your letter under reply reference is made to cost of turntables. I think this expense could be more than counterbalanced by judicious selection of rolling stock.

Since my last communication to you of the 15th inst., I have received two letters from Mr. Grant bearing on the whole question of the character of the Green Ponds Line and rolling stock.

I enclose these letters for your information, with Mr. Grant's concurrence, and would remark that on the subject referred to that gentleman's opinions are entirely at one with my own.

I have, &c.

FRED. BACK, *General Manager.*

*The Hon. the Minister of Lands and Works, Hobart.*

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*Tasmanian Main Line Railway Company, Limited,  
General Manager's Office, Hobart, 19th November, 1888.*

DEAR SIR,

SOME time since, while we were discussing the probable arrangements necessary in the working of the Brighton and Apsley Railway when opened, you mentioned that it was intended to be constructed as a light line, and therefore would not carry the engines of the Main Line Railway. Since then, Mr. Fincham, in writing me, has called attention to the same thing.

I therefore venture to trouble you with the suggestion that you use all the influence you possess to endeavour to get the few particulars altered which makes the difference between the proposed line and one of the character of the Main Line Railway; for it would be nothing less than a national calamity that there should be what is almost equivalent to a break of gauge between the Main Line and the Branch Line.

You have yourself experienced the enormous loss arising from want of uniformity in two systems working together, and must appreciate the trouble that will frequently be caused by your using different rolling stock on the Branch from that on the Main Line Railway.

I do not think the Government can be aware of the practical necessity that one part of a system of railways should be as perfect as the other, on the principle that the weakest link in a chain determines the strength of the whole chain. As a case in point. Since the opening of the Derwent Valley Railway instances have been very numerous in which it has been a very great advantage to us both that the engines and stock of the Main Line Railway should run over the Derwent Valley Railway; and I am sure it will be found precisely the same in the case of the Apsley Railway. As another instance: the Sunday Trains we are now running, one engine (with its attendant driver, fireman, and cleaner) does the work that double the number would be required to do were the Lines not uniform.

The extra cost of making the Apsley Line bear the passenger engines of the Main Line Railway would be so comparatively trivial that I cannot but think that the Government, on a representation from you, would forthwith direct that this small outlay should be incurred. Any assistance that I could give you in interviewing the Minister of Lands or other Members of the Government towards securing this most desirable reform, I will most cheerfully render.

I am greatly averse to engaging the services of the Press in a technical matter, but would rather do so than that the Colony should suffer such a grievous wrong as may be done to it unless this little alteration can be carried out.

I am, &c.

C. H. GRANT.

F. BACK, *Esg., General Manager of Government  
Railways, Launceston.*

*Tasmanian Main Line Railway Company, Limited,  
General Manager's Office, Hobart, 22nd November, 1888.*

MY DEAR MR. BACK,

As you have induced the Government to improve the works of the Chudleigh Line, how very much more important it is to do the same for the Apsley Line, where the difficulties of working will be so very much greater !

Are you aware that the passage of the Constitution Hill involves much heavier pulling than the Flat Top incline of the Main Line Railway, which is very much the worse part of our road ?

At Constitution Hill there are  $6\frac{1}{2}$  miles of maximum gradients against 6 miles of Main Line. The pull on part of Green Ponds of  $\frac{3}{4}$  miles of 1 in 40 without the smallest break will also require great power. I believe it is worse than anything on the Scottsdale Line.

As the railway will doubtless shortly be carried on to Bothwell and the Lake Country, it will become an important railway.

Pray make any use you please of my remarks on the above subject.

Having some time since made important appointments to be at Launceston to-morrow, I fear I shall not see much of you there.

Yours sincerely,

C. H. GRANT.

F. BACK, *Esq.*