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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 162-63 Press / Mis.—

838-40

Dated 20 : 1 1874.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 20th January 1871.

No. 338. Read the following Endorsement of the Acting Consulting Engineer for Railways, dated Madras, 7th December 1870, No. 471:—

From the Agent and Manager of the Madras Railway Company, to the Acting Consulting Engineer for Railways, dated Madras, 2nd December 1870, No. 685.

ADVERTING to the enclosed copy of paragraph 6 of the Secretary's letter of the 14th of October, No. 461, and of Mr. Beresford Anderson's report to the Chairman of the Madras Railway Company, dated the 20th September 1870, I have the honour to apply for the sanction of Government to the payment to Mr. Barnett of an increased price of Rupees 4 per cubic yard for the masonry in the Toongabuddra bridge.

2. The rate which Mr. Barnett has received for this work is Rupees 13 per cubic yard, and the Government will observe from Mr. Beresford Anderson's report that he is of opinion that the contractor is fairly entitled to an increased price, as he was required to execute work of a superior character to that shown in the specification upon which his tender was based.

3. The number of yards of masonry in the bridge is 17,751, so that the amount to be paid Mr. Barnett, and for which sanction is necessary, is Rupees 71,004.

Extract from a letter from the Secretary of the Madras Railway Company, dated London, the 14th October 1870, *No.* 461.

PARAGRAPH 6.—Referring to the subject of Mr. Barnett's claim to increased rates for the masonry he has executed under his contract for the Toongabuddra bridge, which is brought under the Board's consideration by your letter No. 907, I am desired to inform you that, after a careful examination of the papers bearing on the case, in which they have had the advantage of the assistance and opinion of Mr. Beresford Anderson, the Board concur with him and Mr. Going that the contractor is fairly entitled to an increased price for that masonry to the extent of Rupees 4 or 4-8-0 per cubic yard; but with regard to his claim for an extra rate for foundations, the Board, in conformity with Mr. Anderson's opinion, must decline to entertain it. For your information a copy of Mr. Anderson's report on the question addressed to the Chairman is herewith forwarded.

From BERESFORD ANDERSON, Esq., to the Chairman of the Madras Railway Company, dated London, 20th September 1870.

ADVERTING to the discussion which took place yesterday between you, Colonel Smith, and myself, I have now the honour to submit in writing, as requested, my opinion as to the justice of Mr. Barnett's claims for increased prices on account of work executed at the Toongabuddra bridge.

2. The circumstances upon which Mr. Barnett bases his claims, as stated in his letter No. 376-G., of 2nd July 1870, are substantially correct, so far as regards the masonry of the bridge. Mr. Barnett's original tender to execute the masonry works on the North-West Line from the Goondacul Junction to Raichore, inclusive of the Toongabuddra bridge for Rupees 13 per cubic yard, was undoubtedly based upon the specifications for masonry existing upon his contracts then under execution.

3. The Toongabuddra bridge, however, is a work of unusual magnitude and importance. The river is subject to sudden and very violent floods, and the piers are of considerable height, so that masonry of an exceptionally good character was absolutely indispensable.

4. From the commencement of work disputes as to its quality arose between the Company's Officers and the contractor, and eventually Mr. Smart, your Chief Engineer at that time, found it necessary to furnish Mr. Barnett with a revised specification detailing the thickness of stone and the description of bond to be adopted. This specification was rigidly enforced, and it is beyond dispute that the work as it now stands is of a very satisfactory character. I am, therefore, quite of opinion that Mr. Barnett is entitled to some consideration at the hands of the Board, and am prepared to endorse Mr. Going's recommendation for an increased price on account of masonry to the extent of Rupees 4 to Rupees 4-8-0 per cubic yard.

5. I cannot, however, recommend the Board to entertain any claim for an extra rate on account of foundations. It may be quite true that Mr. Barnett has suffered loss on account of this particular work, but the loss was certainly not entailed by any action taken by the Company subsequent to Mr. Barnett's original tender, and I consider the price, Rupees 0-6-6 per cubic yard, paid for excavation of foundations over the whole of his contracts quite sufficient to leave an ample margin for loss in any particular case.

Extract from a letter from the Agent and Manager of the Madras Railway, to the Board of Directors, No. 907, dated 29th July 1870.

PARAGRAPH 45.—No. 376-G, dated the 2nd instant, bringing fully to notice the circumstances under which he claims increased rates for masonry and excavation of foundations in connection with the works at the Toongabuddra bridge.

46. The rate for masonry allowed by the Company to Mr. Barnett under his contract is Rupees 13 per cubic yard, and for excavation of foundations Rupees 0-6-6 per cubic yard, and what he now claims is Rupees 22 for masonry, and Rupees 2 for excavation of foundations.

47. I will ask the Board's special attention to the correspondence* which has passed between Mr. Barnett, the Acting Chief Engineer, and myself on this subject.

* From Mr. Barnett, No. 376-G dated 2nd July.
To do., ,, 2,358, ,, 7th ,,
To Acting Chief Engineer, ,, 2,3,1, ,, 7th ,,
From Mr Barnett, ,, 397, ,, 10th ,,
From Acting Chief Engineer, ,, 355, ,, 13th ,,

48. By my letter to Mr. Barnett of the 7th instant, No. 2,358, I reminded him that, in my communication of the 11th of February last, No. 435, I promised him that, under certain circumstances, I would favourably consider any representations he might make touching an increased price for the masonry in the Toongabuddra bridge, but that I distinctly added that any recommendation which I may make to the Government and the Directors must be contingent upon the completion of our line of Railway in accordance with the conditions of his agreement, as soon after the 15th of May 1870 as possible.

49. I stated that it was therefore somewhat premature to consider and discuss the questions treated of in his letter, but that when the proper time arrives, and upon my being satisfied that he was, as he alleges, required by the Chief Engineer to execute the masonry in a manner superior to that provided for in the contract deed of District XIX., and in accordance with revised specifications, I would give effect to my promise, though I could not hold out any hope that I shall be able to recommend the Directors to admit his claim to a rate of Rupees 22 per cubic yard for masonry, which I stated must be considered most excessive.

50. It will be observed from the Acting Chief Engineer's letter of the 13th instant, No. 355, that Mr. Going concurs in the opinion I expressed that the rate quoted by Mr. Barnett for masonry is excessive, but recommends that a further payment of Rupees 4 to 4-8-0 per cubic yard be made. He remarks, "I do however believe the bridge has cost him more than he had anticipated, and that "he has been a considerable loser by it. Again, the quality of the work is undoubtedly most "excellent. I will even go so far as to say that it is better than has been built into the minor "works of the Railway elsewhere, in the quality of the stone, attention to bond, and general work-"manship. On these considerations and these alone I would feel disposed to recommend an "increased price for the masonry of the Toongabuddra bridge. The price he names however,

Proceedings of the Madras Government, Public Works Department, 20th January 1871.

"namely, Rupees 22 per cubic yard, is, in my opinion, not to be thought of, and I should consider "that, if the Government and the Board would sanction a further payment of Rupees 4 to 4-8-0 per "cubic yard, he might be fully compensated."

51. With regard to the increased rate for excavation of foundations, the Acting Chief Engineer observes, "Mr. Barnett's claim for an increased price for excavation of foundations seems to "rest on pretty much the same basis as that for the increased price of masonry. The rate of "Rupees 0-6-6 is undoubtedly much less than the work could possibly have been done for. More "rock was encountered than was expected. The price of Rupees 2 per cubic yard would not have "been excessive. He had, however, contracted to do it for Rupees 0-6-6."

52. The Board will observe that Mr. Going does not confirm the statement made by Mr. Barnett, that he was called upon by the Chief Engineer to execute a different and more expensive style of masonry than that contemplated in the specifications.

53. I refer to this subject now in order that the Directors may be kept aware of what is passing, and in order to afford them an opportunity of discussing the matter with Major Shaw Stewart and Mr. Beresford Anderson who are now in England.

(True Extract.)
(Signed) W. H. COAKER, Lieutenant, R.E.,
For *Actg. Constg. Engr. for Railways.*

SUBMITTED for the sanction of Government.

2. The Toongabuddra bridge is included in the estimate for District XIX., North-West Line, and the rate for masonry allowed was the same, namely, Rupees 13, as for the other works of the District.

Sanctioned in G. O., No. 2,761, dated 23rd August 1869.

3. The Consulting Engineer wrote in high terms of commendation in his report dated 25th February 1870, as to the admirable masonry which had been built in accordance with the terms of the revised specification drawn up in the year 1868, and Major Shaw Stewart has informed me that he was prepared to support the claim for a higher rate of payment to the extent for which the Agent now asks sanction. Funds are available from the (reduced) allotment in the current year's Budget for the Neilgherry Branch, namely, Rupees 6 lacs, and I recommend that the disbursement of Rupees 71,004 may be sanctioned from that source.

G. O., No. 876, dated 29th March 1870.

(Signed) H. L. PRENDERGAST, Captain, R.E.,
Acting Consulting Engineer for Railways.

No. 339. ORDER THEREON, 20th January 1871, No. 162.

RAILWAY, No. 40.

WITH these papers Captain Prendergast submits proposals for the payment to Mr. Barnett, Railway Contractor, of an increase of Rupees 4 per cubic yard to the rate of Rupees 13 allowed for masonry in the Toongabuddra bridge on the North-West Line of the Madras Railway.

2. The Acting Consulting Engineer represents that the work has been carried out in accordance with the terms of a revised specification providing for masonry

of a superior character to that shown in the specification upon which Mr. Barnett's tender was based, and the Government observe that, in his inspection report recorded with Proceedings of the 29th March 1870, No. 876, Major Shaw Stewart speaks in high terms of the quality of the materials and of the style of execution of the bridge.

3. Looking to the additional expense which has been entailed on the Contractor, and after carefully considering his claims in communication with the Chief Engineer of the Company, the Board of Directors are of opinion that Mr. Barnett is fairly entitled to an enhanced rate of payment.

4. Under these circumstances, and in accordance with the recommendation of the Acting Consulting Engineer, the Government authorize the disbursement of the sum of Rupees 71,004, which is the estimated additional cost, but His Excellency the Governor in Council cannot refrain from expressing his dissatisfaction on learning at this late date that any change in the character of the work involving so large an excess over the original estimate should have been permitted without the previous sanction of Government.

5. Funds being available from the unexpended balance of the allotment for the Neilgherry Branch, the charge will be met from that source, and the transfer reported for the information of the Government of India.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Acting Consulting Engineer for Railways,

Exd. E. C. Shunker.

S 80 4

London 20th September 1870

Dear Sir,

In reference to the discussion which took place yesterday between you Colonel Smith and myself, I have the honor to submit my opinion as requested, as to the justice of Mr Barnetts claims for increased prices on account of work executed at the Lungabudra Bridge.

The circumstances upon which Mr Barnett bases his claims, as stated in his letter dtd 3rd & 6th of July 1870 are substantially correct so far as regards the masonry of the Bridge. Mr Barnetts original tender to execute the masonry work on the North West Line from the Goondacul Junction to Raichore via Luxurie of the Lungabudra Bridge for Rs 13 per Cubic yard was undoubtedly based upon the specifications for masonry executing upon his Contract in the under execution

The Lungabudra Bridge however is a work of unusual magnitude and importance. The river is subject to sudden and very violent floods and the piers are of considerable height so that

masonry of an exceptionably good character was absolutely indispensable.

From the commencement of work disputes as to its quality arose between the Company's Officers and the Contractor and eventually Mr. Smeet your Chief Engineer at that time found it necessary to furnish Mr. Barnett with a revised Specification detailing the thickness of stone and the description of bond to be adopted. This specification was rigidly enforced and it is beyond dispute that the work as it now stands is of a very satisfactory character. I am therefore quite of opinion that Mr. Barnett is entitled to some consideration at the hands of the Board, and am prepared to endorse the Going's recommendation for an increased price on account of masonry to the extent of Rs 4 to Rs 4½ per cubic yard.

I cannot however recommend the Board to entertain any claim for an extra rate on account of foundations. It may be quite true that Mr. Barnett has suffered loss on account of this particular work, but the loss was certainly not entailed by any action taken by the Company subsequent to Mr. Barnett's original tenders and I consider the price Rs. 0-6-6 per cubic yard paid for excavation of foundations over the whole of his Contracts quite sufficient to leave an ample margin for loss in any particular case.

I have the honor to be
Dear Sir
Your Obedient Servant
Signed Beresford Anderson

The Chairman
Madras Railway Company.

/True Copy/

W. J. Keir
Agent and Manager.

Comptroller

Extract from a letter from the Secretary Madras Railway Company, dated London the 14th October 1870, No 461.

Para-6. Referring to the subject of Mr Bennetts' claim to increased rates for the masonry he has executed under his Contract for the Tungabudra Bridge which is brought under the Board's Consideration by your letter 907, I am desired to inform you that after a careful examination of the papers bearing on the case, in which they have had the advantage of the assistance and opinion of Mr Beresford Anderson the Board concur with him and Mr. Going that the Contractor is fairly entitled to an increased price for that masonry to the extent of Rs 4 or 4½ per Cubic yard; but with regard to his claim for an extra rate for foundations, the Board, in Conformity with Mr. Anderson's opinion, must decline to entertain it. For your information a copy of Mr. Anderson's report on the question addressed to the Chairman is herewith forwarded.

/True Extract/

Agent and Manager.

No. 685.

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE.

Madras, 2d December 1870.

From

R. B Elwin Esqre

Agent and Manager. of the MRly

To

Captain H L Prendergast RE

Acting *Consulting Engineer for Railways.*

Sir,

Adverting to the enclosed Copy of paragraph VI of the Secretary's letter of the 14th of October, No 461, and of Mr Beresford Anderson's report to the Chairman of the Madras Railway Company dated the 20th September 1870, I have the honor to apply for the sanction of Government to the payment to Mr. Barnett, of an increased price of Rupees 4-0-0 per cubic yard for the masonry in the Tungabudra Bridge.

2. The rate which Mr Barnett has received for this work is Rupees 13 per Cubic yard and the Government will observe from Mr Beresford Anderson's report that he is of opinion that the

Contractor is fairly entitled to an increased price, as he was required to execute work of a superior character to that shewn in the Specification upon which his tender was based.

3. The number of yards of masonry in the Bridge is 17,751 so that the amount to be paid Mr Bennett, and for which sanction is necessary, is Rupees 71,004-0-0.

I have the honor to be
Sir
Your most obedient Servant

Wm J. Larkin

Agent and Manager

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

No. 1085.

Dated 24th December 1890.

Rec'd. 31st Do

No. 8012 Secd

Applying for the loan of Col. Hobbs' Report on the Failure of the Foundations of the Bridge on the Vaniyar River by Flood, for Office Perusal for the reasons stated in the Correspondence noted in the Margin.

Extract from a Letter from the Agent and Manager, Madras Railway, to Board of Directors No 907 of 29 July 1890.

45. No 376 G dated the 2d instant, bringing fully to notice the circumstances under which he claims increased rates for masonry and excavation of foundations, in connection with the works at the Toongabudra Bridge

46. The rate for masonry allowed by the Company to Mr Barnett under his contract, is Rupees 13 per cubic yard, and for excavation of foundations As. 0-6-6 per cubic yard, and what he now claims is Rupees 22 for masonry and As. 2-0-0 for excavation of foundations.

47. I will ask the Board's special attention to the correspondence which has passed between Mr Barnett, the Acting Chief Engineer and myself on this subject.

48. By my letter to Mr Barnett of the 7th instant, No 2358, I reminded him that in my communication of the 11th of February last, No 435, I promised him that under

certain circumstances I would favorably consider any representations he might make touching an increased price for the masonry in the Toongabeedra bridge, but that I distinctly added, that any recommendation which I may make to the Government and the Directors must be contingent upon the completion of our line of railway in accordance with the conditions of his agreement, as soon after the 15th of May 1870 as possible.

49. I stated that it was therefore somewhat premature to consider and discuss the questions treated of in his letter but that when the proper time arrives and upon my being satisfied that he was as he alleges required by the Chief Engineer to execute the masonry in a manner superior to that provided for in the Contract Deed of District XIX and in accordance with revised specifications, I would give effect to my promise, though I could not hold out any hope that I shall be able to recommend the Directors to admit his claim to a rate of Rupees 22 per cubic yard for masonry which

I stated must be considered most excessive."

50. It will be observed from the Acting Chief Engineer's letter of the 13th instant, No. 355, that Mr. Going concurs in the opinion I expressed that the rate quoted by Mr. Barnett for masonry is excessive, but recommends that a further payment of Rs. 4 to 4/8/" per cubic yard be made. He remarks, "I do however "believe the bridge has cost him more than he "had anticipated and that he has been a "considerable loser by it. Again the quality "of the work is undoubtedly most excellent. "I will even go so far as to say that it is better "than has been built into the minor works "of the Railway elsewhere in the quality of the "stone, attention to bond and general workman="ship. On these considerations and these "alone, I would feel disposed to recommend "an increased price for the masonry of the "Toongabeedra bridge. The price he names "however, viz: Rs. 22 per cubic yard is in my "opinion not to be thought of, and I should "consider that if the Government and the

"Board would sanction a further payment of
"Rs. 4 to 4/8/" per cubic yard, he might be
"fully compensated".

51. With regard to the increased rate for excavation of foundations, the Acting Chief Engineer observes "Mr Barnett's claim "for an increased price for excavation of "foundations seems to rest on pretty much "the same basis as that for the increased "price of masonry. The rate of 0/6/6 is "undoubtedly much less than the work "could possibly have been done for. More "rock was encountered than was expected. "The price of Rs 2-0-0 per cubic yard "would not have been excessive. He had "however contracted to do it for 0/6/6."

52. The Board will observe that Mr Going does not confirm the statement made by Mr Barnett, that he was called upon by the Chief Engineer to execute a different and more expensive style of masonry than that contemplated in the specifications.

I refer to this subject now in order that the Directors may be kept aware of what is passing and in order to afford them an opportunity of discussing the matter with Major Shaw Stewart and Mr Beresford Anderson who are now in England.

(True Extract)

W.H. Yeaker Lieutenant R.E.
for Acting Consulting Engineer
for Railways

Submitted for the
sanction of Government.

The Toongabudra bridges
2.
is included in the Estimate for District
Sanctioned in G.O. No 1092/61 2/23rd August 1869.
XIX, North-West Lines, and the rate
for masonry allowed was the same, viz:
Rupees 13 as for the other works of the
District.

The Consulting Engineer
3.
wrote in high terms of commendation
G.O. No 876 3rd-9th March 1870.
in his report dated 25th February 1870,
as to the admirable masonry, which has
been built in accordance with the terms
of the revised specification drawn up
in the year 1868; and Major Shaw Stewart
has informed me, that he was prepared

to support the claim for a higher rate of payment, to the extent, for which the Agent now asks sanction. Funds are available from the (reduced) allotment in the current years Budget for the Vellghetty Branch, viz: Rupees 6 Lacs; and I recommend that the disbursement of Rupees 71,004 may be sanctioned from that Source.

Henry Lindsay Captain R.E.
Acting Consulting Engineer for Railways

Madras
December
1870

To
The Secretary to Government
Public Works Department
Fort St George.

Public Works Department
Rec'd offg Asst for Secy
Issue
The Comr: Gen'l
for Railways

To The Secy to Govt
Gp. W. Dept.
Fort St George

Dated 7th December 1870
Read 9th

No 478
Enclosures 1

Submitting a letter from the Agent and Manager of the Madras Railway, requesting sanction for the sum of Rupees 71,004.

No 338

No 162-163-20 Sept/70

P.W.D. Public

No. 162

Proceedings of the Madras Government

162. Read the following

From

The Consg Engineer for Railways } (M. E. Ro. 2471 & 7th Dect/70)

With these papers Captain Prendergast submits proposals for the payment to Mr. Barnett, Railway Contractor, of an increase of Rs 4 per cubic yard to the rate of Rs 13 allowed for masonry in the Soangabudra bridge on the North West Line of the Madras Railway.

The Acting Consulting Engineer represents that the work has been carried out in accordance with

the

the terms of a revised specification providing for masonry of a superior character to that shown in the specification upon which Mr. Barnetts tender was based, and the Govt. observe that, in his inspection report recorded with Proceedings of the 29th March /70. No. 876, Major Shaw Stewart speaks in high terms of the quality of the materials and of the style of execution of the Bridge.

Looking to the additional expense which has been entailed on the Contractor, and after carefully considering his claims in communication with the Chief Engineer of the Company, the Board of Directors are of opinion that Mr. Barnett is fairly entitled to an enhanced rate of payment.

Under these circumstances, and in accordance with the recommendation of the Acting Civil Engineer the Govt. authorize the disbursement of the sum of Rs 71,004. which is the estimated additional cost, but His Excellency the Governor in Council cannot refrain from expressing his dissatisfaction on learning at this late

late date that any change in the character of the work involving so large an excess over the original estimate should have been permitted without the previous sanction of Government.

Funds being available from the unexpended balance of the allotment for the Neilgherry branch, the charge will be met from that source, and the transfer reported for the information of the Govt of India.

163

M. E. No. 163 dated 20th July

Copy of the above forwarded for the information of

28
2.

To
The Govt Engineer for Railways
Despd 21/1/71

of the Government of India with a request that the Proceedings of this Govt may receive the confirmation of His Excellency the Governor General in Council.

13

25

42
2

Despd 21/1/71-

Govt. of 1870. Madras.

PUBLIC WORKS.

To Hon'ble Consulting Engr
for Railways
and
To the Secretary to the Govt
of India

Dated

Recd.

G. O. 20th January No. 162-163.

Nos. 238-239 & 240

Transmitting, for the information, Copy of Proceedings relative to the payment to Messrs Barnett Railway Contractor, Rs. 1-2-0 per cubic yard for the value of Rs. 1-3 allowed for Masonry in the Tungabadra bridge on the N. W. Line of the Madras Railway.

Transmitting, for the information, Copy of Proceedings relative to the payment to Messrs Barnett, Railway Contractor, Rs. 1-2-0 per cubic yard for the value of Rs. 1-3 allowed for Masonry in the Tungabadra bridge on the N. W. Line of the Madras Railway, Authorized with Remarks.

Further Rec'd 481 Engr
1058 Engr 15-4