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MADRAS RECORD OFFICE.

Government of Madras.

Public Works - DEPARTMENT.

G.O. No. 3840	Press Mis.
294-295	
Dated 13-6-1865	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
13th October 1865.*

No. 294. Read the following letter from Captain J. MULLINS, R. E., Consulting Engineer for Irrigation and Canal Company, to Colonel C. A. ORR, R. E., Secretary to Government, Department Public Works, dated Kurnool, 25th September 1865, No. 87 :—

SIR,

2 Letters in original from Agent, General Nos. 390 and 516.
1 Copy of a letter to Agent, No. 171.

From Chief Engineer No. 456 of the 20th July last, with Agent's Endorsement No. 212, 10th August.

To Agent No. 171 of the 15th idem.
From Chief Engineer, No. 715, 8th September, with Agent's Endorsement No. 327, 18th September.

Vide Proceedings Madras Govt. No. 1,666, dated 16th June 1865.

1. I have the honor to forward, for the orders of Government, the correspondence as per margin, on the subject of the travelling expenses of the Provisional Chief Engineer.

2. In their Resolution, dated 27th April 1865, the Board of Directors substituted a bill for actual expenses incurred by Mr. Latham in travelling, for the fixed allowance drawn by the late Chief Engineer, and Mr. Latham in the first of the above letters explains the nature of the charges which he proposes to bill.

3. It was not clear from this letter what the probable charge would be, and, therefore, before submitting the letter to Government, some additional information was asked for, and the Chief Engineer's letter of the 8th instant, has been received in reply. Mr. Latham says, paragraph 5, that he is quite unable to make an estimate of either the means or the cost of future travelling, and that he proposes to

• Paragraph 4.

charge* for all, and only such travelling expenses as he incurs in, and only for, travelling on the business of the Company in the way which will, in his judgment, be, in the broad view, most economical to the Company.

4. It appears to me very inadvisable that this Office should have frequently to make references for explanations regarding items included in the Chief Engineer's travelling expenses, and yet this inconvenience is hardly to be avoided if the charges vary greatly, and there be no fixed standard for guidance, and as it is necessary that all expenditure should be audited in this Office, I would recommend that the Agent and Manager be requested to ask the Board to re-consider their decision, and to substitute a liberal, fixed, allowance for the varying expenses, and which should cover all travelling expenses incurred in visiting works or the sites of projected works, &c. The allowance might, perhaps, with advantage be composed of:—

† 3 Horses at Rupees 30	...	...	...	Rs. 90
2 Bandies at " 30	...	...	...	60
Tents, &c.	...	...	...	15
Servants and Lascars	...	...	...	35
				200

1st.—A fixed monthly allowance for equipage, say, Rupees 200.†

2nd.—An additional mileage allowance, at Annas 8 a mile, for all distances travelled in excess of an ordinary morning's ride of, say, fifteen miles.

In the meantime, I would request authority to pass all items of charge which may be included in the bills of travelling expenses, and which may appear to be reasonable.

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13th October 1865.*

P. S.—I have consulted Mr. Latham in fixing both the allowance for equipage and that for mileage. The charges are, I think, moderate, and they do not exceed, including Lascars, those of a Superintending Engineer, Department Public Works.

From J. H. LATHAM, Esq., Provisional Chief Engineer, to F. H. HENSLOWE, Esq., Agent and Manager, dated Kurnool, 20th July 1865, No. 456.
Chief Engineer's allowances.

SIR,

1. In reference to the Board's Resolution quoted in Secretary's letter* No. 58, 1865, and your No. 329 of 11th instant.

* No. 58.

2. I see that the allowance sanctioned by the Board for Engineers is based on a letter of the Chief Engineer to the Secretary, No. (nil) of 17th January 1860.

3. He reckons there that field expenses then cost—

	Per-centage, &c., maintenance.	Keep.	Total.
	RS.	RS.	RS.
1 Horse per mensem at	10½	24	34½
1 Cart and bullocks „	3	23	26
Tents and furniture „	10½	20	30½

But since that time prices have increased, so that the allowance of an Engineer in camp does not do more than cover keep and repairs.

4. The Board wish me to charge actual expenses. I assume they do not wish me to make a return of every measure of grain given my cattle, or every "account" given by a horse-keeper of the way he professes to have spent the Rupees advanced him for travel. I understand that they wish me to charge actual expenses of Hotels, Railway, cabs, boats, or posted bearers and bullocks, and the allowance suitable to the actual equipment I keep up.

5. In regard to the last, I proposed to charge for my equipment so far as it is kept strictly for the Company's work as necessary for its proper expedition as follows:—

	Rupees
For each horse	35
Do. do. cart and bullock...	30
Do. do. dog cart...	15
Do. do. 4-wheel...	20
Tents and furniture, palanquin, &c.	40
For bearers hired by the month, actual cost.	

6. I shall commence this system on the 1st proximo.

No. 242.

Forwarded for the approval of the Consulting Engineer, with reference to paragraph 1 of the Agent's No. 186 of 21st July 1865.

MADRAS,
10th August 1865.

(Signed) F. H. HENSLOWE,
Agent and Manager.

From Captain J. MULLINS, R. E., Consulting Engineer for Irrigation and Canal Company, to F. H. HENSLOWE, Esq., Agent and Manager for Irrigation and Canal Company, dated Kurnool, 15th August 1865, No. 171.

SIR,

1. In acknowledging the receipt of the Chief Engineer's letter No. 456, of the 20th ultimo, which was transmitted with your endorsement No. 242 of the 10th instant, I have the honor to inform you that Mr. Latham's proposition regarding the charges to be made by him to cover the expenses of travelling will require the sanction of Government before it can be acted upon, and as the particulars given in paragraph 5 of the Chief Engineer's letter do not show sufficiently clearly what the proposed arrangement would practically be, or what the maximum expense to the Company would amount to in the event of the Chief Engineer being in camp the whole month, I shall feel obliged if you will furnish me with such additional information as will enable me to make the necessary application to Government.

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13th October 1865.*

2. I am not aware of the views of the Board of Directors in making a difference in the way in which charges for travelling expenses were billed by Colonel Cotton and are to be adjusted by Mr. Latham, but they do not seem to have contemplated any great increase of expense under this head. Mr. Latham has not explained whether he intends at the same time to charge for more than one of the conveyances, dog cart, four-wheeled carriage, and palanquin, which he enumerates, nor does he state how many horses he considers it necessary to keep or use when travelling on duty. A set of bearers, which, it would seem, Mr. Latham contemplates engaging, would cost Rupees 100 to 120 per mensem, and in the Kurnool District bearers to be available must, I apprehend, be maintained continuously, so that there would be some risk of their cost proving out of proportion to the value of their services.

3. It appears to me that it is open to the Chief Engineer to select, at his discretion, his mode of travelling within the limits imposed by the circumstances of the District through which he is proceeding. Now, in Kurnool, posted bullocks may be considered the only available means of quick travelling, except indeed that bearers can be got at Kurnool for a single run from that station. Mr. Latham also may require to have horses at the end of the run by bullock dawk, but I am of opinion that should he prefer to use a dog cart or a four-wheeled carriage, that would be a matter of private choice only, and the Company should not be called upon to incur any extra expense on this account.

4. With regard to the charges mentioned in paragraph 4 of Mr. Latham's letter, it is necessary that I should mention that Hotel expenses cannot be admitted if any allowance be drawn regularly to cover marching expenses, but that should actual expenses only when the Chief Engineer is absent from head quarters, be billed, I shall be prepared to recommend the Government to sanction these charges also.

(True Copy.)

(Signed) J. MULLINS, Captain, R. E.,
Cons. Engr. for I. & C. Company.

From J. H. LATHAM, Esq., Provisional Chief Engineer, to F. H. HENSLOWE, Esq., Agent and Manager Madras Irrigation and Canal Company, dated Kurnool, 8th September 1865, No. 715.

SIR,

1. In reference to Captain Mullins' letter No. 171 of 15 ultimo, forwarded to me with your foot note No. 474 of 18th ultimo, I have the honor to make the following explanation.

2. His paragraph 1.—The arrangement proposed by the Board is that in lieu of drawing a fixed travelling allowance as a composition for all my travelling expenses, I should in future be re-paid my actual travelling expenses monthly.

3. The Board did not fix any maximum.

4. His paragraph 2.—My intention, founded on this wish of the Board's is to charge for all, and only such, travelling expenses as I incur in, and only for, travelling on the business of the Company in the way which will in my judgment be, in the broad view, most economical to the Company.

5. I am quite unable to make an estimate of either the means, or the cost of future travelling. My experience of the past is all I can furnish accurately.

6. On the 1st ultimo the new system commenced, I found myself in Madras possessing a mare, and a horse not a match for her and not broken thoroughly to harness, a dog cart for one or two horses, a bandy, bullock coach and pair of large bullocks.

7. As I cannot drive over country tracks with one horse, and no match for the mare could be got singly in Madras, except one old splinted screw at a high figure, I purchased a pair, either of which matches her, and sold my former horse. Expecting to have for a month no travelling beyond the first eight sections, any part of which I can reach with the above equipment, and the loan of Mrs. Latham's pony carriage, and that in far less time than I could with bearers, I have not engaged a set of bearers. I bought a palanquin, and made a quick passage by palanquin via Nellore to Kurnool, getting here a fortnight before my nearly empty bullock coach which

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13th October 1865.*

started two days earlier, and came by bullock dāk. In October I hope to visit Bellary, and see, for the first time, the ground connected with the surveys. Mr. Gordon informs me, that it is of no use bringing a palanquin unless I bring two sets of bearers of my own. With dāk bullocks, he thinks, I can see the whole in five weeks, if the weather be good. This seems slow.

8. As to trusting to bullock dāk, it is very well on high roads where bullocks are accustomed to the work. But there are no such roads in the neighbourhood of our first eight sections, and to travel by night with unknown, and unruly bullocks on half formed roads on which the bridges and approaches have no parapets, and from Pāneum southward half of them are fallen in, is a needless risk.

9. Taking the formula

$$R \propto (1 - \frac{d}{30})^2$$

where d = miles in the day's stage one pair of bullock will make under a resistance R, and observing that in wet weather on a soft unmetalled Government road, in a cotton soil District, one pair of average bullocks can just move a loaded bullocks coach, whose resistance we will call C, we have d = 0 when R = C and $R = C(1 - \frac{d}{30})^2$. If then it is necessary to make the 12 mile day's stage in the ordinary time we must have d = 12, and $R = C(1 - \frac{12}{30})^2 = C(1 - \frac{2}{5})^2 = \frac{9}{25}C$, or for each pair of bullocks little more than $\frac{1}{3}$ rd the full resistance C. This is singularly in accordance with experience. The Rev. R. D. Johnston and family came recently up the Koondam valley, and found that they could not move with one pair, nor make ordinary stages with two pair of bullocks in each bandy; and Mr. Cotton sends his private bandies in from Bowanassey for groceries with three pair of bullocks attached. In fact, when bullock dāking, between June and September inclusive, the event only can show when you will get to the end of your journey, and in any month it is doubtful in what vagoo you may upset.

10. I am yet undecided, therefore, as to the best way of travelling in Bellary in October. I may mention that I inserted an allowance for a four-wheel carriage because if my present dog cart becomes unserviceable, I shall buy a four wheel waggonette, though not otherwise.

11. On the 15th ultimo, after a stage ankle deep across the fields from Nundialumpett, to strike the Government road south of Dhoor, anticipating easier work after reaching the high road, my bearers at last came upon it, but so far from being an improvement on the fields it presented the appearance, from one margin to the other, of soft, juicy clay recently well wetted, and puddled by navies' boats, without path or ruts. The bearers stood still with disappointment and shook the palanquin with laughter, and we then proceeded on the outer margin of the side ditch of the road.

12. From Chagulmurry to Moottyalapad, thirteen miles, took the bearers from 8-45 P. M., to 6 A. M. Mr. Clay, the Missionary there, was not surprised.

13. The former road is in Cuddapah, the latter in Kurnool. I found bearers more easily got, and more to be relied on at every stage up to Pāneum inclusive (thirty-six miles from Kurnool) than bullocks, and doubtless as quick. I can drive, in or out, the two or three stages nearest Kurnool, when it proves desirable.

No. 327.

Communicated to the Consulting Engineer, with reference to his No. 171 of 15th August 1865.

MADRAS,
18th September 1865.

(Signed.) F. H. HENSLOWE,

Agent and Manager.

No. 295. ORDER THEREON, 13th October 1865, No. 3,040.

ESTABLISHMENT, No. 24.

1. The Government concur in the views of the Consulting Engineer of the Madras Irrigation and Canal Company, as expressed in paragraph 4 of the foregoing letter. The Manager should be requested to invite the Directors to re-consider their decision regarding the travelling expenses of their Chief Engineer.

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13th October 1865.*

2. Pending the receipt of the Directors reply on this subject, the Consulting Engineer is authorized to pass the bills which may be submitted by the Company's Chief Engineer on account of his actual expenses.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for the Irrigation and Canal Company.
.. Manager for do. do.

Exd. S. T. Augustin.

Consolidating Engineers Office.
Irrigation and Canal Company.
Removal 20th September 1865.

To
From Captain J. Mullins R.E.
Cons Engineer for R.E.C.
To His Secretary to Government
Department of Public Works

From Chief Engrs No 466 of the 1.
20th July last with Agmt
Endorsement No 242-18 of the
1st August No 171 of the 15th Engr.
From Chief Engrs No 715-2nd Engr.
with Agmt endorsement No
227-18th Sept.

Sir, I have the honor to forward for the orders of Government the correspondence, as per margin, on the subject of the travelling expenses of the Provisional Chief Engineer.

vide
J.M.E. No 1666
dated 16 June 1865

2. In their resolution dated 27th April 1865 the Board of Directors substituted a bill for actual expenses incurred by Mr Catham in travelling, for the fixed allowance drawn by the late Chief Engineer, and Mr Catham in the first of the above letters explains the nature of the charges which he proposes to bill.

*para 1.

3. It was not clear from this letter what the probable charge would be, and therefore before submitting the letter to Government some additional information was asked for, and the Chief Engineer's letter of the 8th instant has been received in reply. ~~and~~ Mr Catham says, para 5, that he is quite unable to make an estimate of either the means or the cost of future travelling, and that he proposes to charge for all, and only such travelling expenses as he incurs in, and only for, travelling on the business of the Company in the way which will in his judgment be, in the broad view, most economical to the Company.

4. It appears to me very undesirable that this Office should have frequently to make references for explanations regarding items included in the Chief Engineer's travelling expenses, and yet this inconvenience is hardly to be avoided if the charges vary greatly and there be no fixed standard for guidance, and as it is necessary that all expenditure should be audited in this Office I would recommend that the Agent and Manager be requested to ask the Board to reconsider their decision and to substitute a liberal, fixed, allowance for the varying expenses, and which should cover all travelling expenses incurred in visiting works or the sites of projected works. The allowance might perhaps with advantage be composed of

- 1st a fixed monthly allowance for equipage say Rs 200—
- 2nd an additional mileage allowance, at a rate of 8 paise a mile, for all distances travelled in excess of an ordinary morning's ride, say, 15 miles.

3 Horses	Rs 20	=	20
2 Bauls	Rs 30	=	15
2 Servants	Rs 10	=	10
4 Horses		=	35
			<u>240</u>

In the meantime I would request authority to pass all items of charge which maybe included in the bills of travelling expenses and which may appear to be reasonable.

I have the honour to
 Your Most Obedt^{servt}
 Wm. Mullins Captain R.E.
 Consulting Engineer

P.S. I have consulted Mr. Pasham in fixing both the allowances for equipage and that for mileage. The charges are, I think, moderate, and they do not exceed, including horses, those of a Superintending Engineer D.P.W.

123040

Proceedings of the Madras Government

Under date the 13th October 1865

Read the following

From the Consulting Engineer &c &c

Forwards for the order of
Government the correspondence within
mentioned on the subject of the travel
and expenses of the Provincial
Chief Engineer.

Per order 25th September 1865 (No. 5)

The Government concur
in the views of the Consulting
Engineer of the Madras Sijar
and Canal Company ^{as} expressed
in para 4 of the foregoing
letter. The Manager should
be requested to invite the
Directors to reconsider their
decision regarding the travel
expenses of their Chief Engineer.

Pending the receipt of
the Directors reply on this
subject the Consulting Engineer

W.D.

16th Jan 1865 & 22/1666

1865-2 of Madras
No. 1865-2 of Madras
No. 3777.

The Consulting Engineer
J. J. J.

The Secretary to Govt
P. M. D.

Dated 25th September 1865
Calcutta
G. S.

W.D.

C. S. 1865-2 of Madras

1865-2 of Madras

Forwards for the order of
Government the correspondence within
mentioned on the subject of the travel
and expenses of the Provincial
Chief Engineer.
No. 30410-135 Oct 1865

is authorized to pay the bills
which may be submitted by
the Company's Chief Engineer,
on account of his actual
Expenses—

AS

If the preceding Engineer for the
S. B. L. - H. H. H.
Gen. Manager - 30 - 30 ✓

18
—
3

3 letters ✓

See P. 14th Col. 100

To V 1848 Dep't
 To W: of Govt for Act
 2

N^o 3040

Proc. of the Inhabitants
of 10 Oct/65

Chief Engineer, Madras And
Ct Co. Refusing orders on certain
correspondence submitted by the
Consulting Engineer regarding
the travelling expenses of -

N^o 294. 295

2.5. Oct 1965 - Don 7m