

Fort Saint George, Public Works Consultation of 22nd March 1859.

No. 52. Read the following letter from Colonel C. E. FABER, Chief Engineer; to J. D. BOURDILLON, Esq., Secretary to Government, dated 7th January 1859, No. 6849.

SIR,

With reference to Extract from the Minutes of Consultation, No. 2664, dated 8th December 1858, I have the honor to forward for submission to Government, a Report* by Captain Orr, Acting Superintending Engineer, Northern Circle, on the Works under construction by the Executive Engineer at Bangalore, and on the Books and Accounts of that Officer.

* Dated 22nd December 1858.
1 Enclosure.
1 Original Report.

2. This Report is, I consider, satisfactory, and shews that fair progress has been made generally with the Buildings, but with regard to the suggestion in para. III for re-building the entire Walls of the old Dragoon Barracks, Captain Mayne will be directed to submit a special report.

3. The inferior nature of the soil of which the bricks for the New Dragoon Barracks are being made has attracted my attention, and Captain Mayne has been requested to state whether the substitution of stone would be equally economical as it certainly would be far preferable.

4. Captain Mayne's attention will also be called to the suggestion in para. IX, for enclosing more ground on the West side of the Barracksquare, and it will also be drawn to the seemingly vicious position of all the houses outside the Redan, thus entirely masking its whole base.

5. The deficiency of superintendence has been noticed by Captain Orr, but as the subject has been already referred for report, under Extract Minutes Consultation, No. 2789, dated 23rd December 1858, and I am awaiting the receipt of further information from the Executive Engineer, I shall not enter on it at present.

Letter from Captain C. A. ORR, Acting Superintending Engineer, Northern Circle; to the Officiating Chief Engineer, dated Bangalore, 22nd December 1858.

SIR,

Having in obedience to the orders conveyed in Extract Minutes of Consultation of the 8th December 1858, No. 2664, inspected the Works under the charge of the Executive Engineer of this station, and examined his Accounts, I have the honor to report that the latter appear to be kept in a regular and careful manner, very nearly in accordance with the forms prescribed in the Manual for the guidance of this Department; but on counting the balance of Cash I found a small deficiency of Rupees 5-4-11, which was immediately made good by Captain Mayne, and was explained to have been caused, in all probability, by the carelessness of the late Head Accountant, who had been recently discharged for some suspicious conduct and want of attention.

2. The Cash Book in other respects has been kept, on the whole, in a satisfactory manner, although entries have not always been made at the moment of disbursement, as they invariably should be, nor has a balance been struck, according to rule, every day. It also does not show in detail the particulars of the articles for which the respective payments have been made, as prescribed in form V of the Manual, for however desirable in theory it is that this should be done, it is found in practice better to dispense with it, and merely to note against the entry, the number of the voucher to which the disbursement refers. To pay the various Contractors, at the moment of receipt, for each separate delivery of the articles they supply, would be very inconvenient, and most distasteful to them, as it would oblige them to lose much time in proceeding to the Office for petty sums. The course adopted by Captain Mayne of paying them weekly is therefore, in my opinion, judicious, and gives perfect satisfaction without vitiating in the least degree the correctness of the Cash Book as a daily record of actual money transactions.

3. I have pointed out the propriety of entering every payment as it is made, and of balancing the Cash Book daily, and these points will now be attended to.

4. The Executive Engineer is careful not to draw more funds than will suffice to meet his current outlay, and his Cash is deposited in a strong Box, kept in a building within the enclosure of his Office, under the protection of a Sepoy Guard.

enclosed

5. The Station Books (or Account Current, of the respective Works and portions of Works, are well and clearly kept, though almost in superfluous sub-division, and the charge and issue of Stores of all descriptions are carefully managed. In looking over the Account of outstanding advances for building materials, which up to the 31st of last October amounted to Rupees 37,022-1-3, I find that of advances made by Major DeButts, there is still unsettled a sum of about Rupees 5,500, which Captain Mayne anticipates some delay, if not difficulty in adjusting.

6. The New Works at present in hand are:

I. Constructing Married men's Quarters in old Dragoon Barracks.

Estimate Rupees 90,000, expenditure up to 31st October 1858, Rupees 3,925-14-10, of this building one block of 20 Quarters has its door and window frames all built in, the walls well raised, and part of the wood work of the verandah fixed. The basement of a second block of 16 Quarters is also completed.

In the sanctioned design only one Cook-Room and Privy are allowed for 3 families, but Captain Mayne, with the approval of the Officer Commanding the Division, has proposed a modification of the Plan by which, without any additional expense, each family will be provided with separate accommodations of that kind, and with a small back yard for exclusive use. The change is a very desirable improvement.

II. Improving No. 2 Range of the European Horse Artillery Barracks.

Estimate Rupees 16,175, expenditure up to 31st October 1858, Rupees 13,689-2-1. This building is all but ready, and will be delivered over in a few days, the first Range having been completed by Major DeButts, and for some time in occupation. The alterations and improvements have been well executed, and now make the Barracks very commodious and airy.

III. Improving and enlarging the old Dragoon Barracks.

(Estimate Rupees 1,55,600)

Four Ranges of these Barracks were completed by Major DeButts, and the alteration of two others, Nos. 5 and 6, is now in progress, No. 5 being so well advanced as to have the wood-work of the new roof almost entirely fixed, while the verandahs are covered in and plastered. The work is being executed as well as the nature of the bricks procurable at Bangalore will permit, but I should bring to notice that it seems wretched bad economy to build upon the old walls to raise the height of the inner rooms to 22 feet, as they are constructed of bad materials, and have been so often broken into for the purpose of inserting, or altering the position of Saddle racks and other fixtures, as to be greatly shaken and weakened. As they are only some 12 feet high, their removal and erection of new walls, from the level of the basement would not add more, I should think, than Rupees 3,000 to the cost of each Range, and I would recommend that the three still untouched may be entirely re-built. The alteration of No. 6 Range, having been only lately commenced, the foundations are completed and the basement in progress.

IV. Constructing Serjeant's Quarters in Old Dragoon Barracks.

	Rs.	A.	P.
Estimate	23,750	0	0

Materials are being collected.

V. Constructing Quarters for Armorer Serjeant and Work-shop.

Estimate	2,730	0	0
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For this work also Materials are being collected.

VI. Constructing Guard Room for Native Cavalry.

Estimate	950	0	0
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This building has just been begun by a Contractor, who has undertaken to erect it under a very satisfactory agreement without any advance, stipulating only for payment twice monthly for work actually performed.

VII. Constructing Staff Serjeant's Quarters for Native Cavalry.

	Rs.	A.	P.
Estimate	4,830	0	0

This is also being built on a Contract similar to that above described, and is being well and rapidly completed, the door and window frames being fixed, and all the walls raised about half their intended height.

VIII. Constructing Staff Officer's Offices.

	Rs.	A.	P.
Estimate	9,050	0	0
Expenditure up to the 31st October 1858	1,721	5	5

The foundations of this only are in.

IX. Constructing new Dragoon Barracks on the Race Course.

Estimate	5,92,250	0	0
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Expenditure up to 31st October 1858.

These buildings were commenced in November 1857, and have not made very rapid progress in consequence, I understand, of the difficulty of keeping up the supply of bricks and lime, although these are prepared by the Executive Engineer, as well as obtained from Contractors. At the date of my inspection the work could scarcely be said to be in full progress. Comparatively few workmen were engaged on them, as no surplus stock of bricks, with which to resume operations after the rains, was kept on hand at the end of last working season, and owing to the lateness of the past monsoon, none have yet been burnt. A Kiln is now nearly ready, and as 15,000 are being moulded daily, besides those to be delivered by Contractors, who have engaged to supply 18 lacs of them within the next 4 months, I think the supply, with moderate exertion, should be easily kept up, although I regret to say, the quality is exceedingly inferior, from the sandy nature of the only earth procurable for their manufacture. The Executive Officer assures me that no better soil is to be found any where within a reasonable distance, and if this be the case, I think it would be much better to build entirely with the excellent flat stone now used only for the foundations and basements, and which does not cost more, I understand, than the bricks. The lime is excellent. The timber also is of the best description, but should be of a little larger scantling in the verandahs, where the joists $6 \times 3\frac{1}{2}$, appear scarcely strong enough.

8. The present state of progress of these Barracks is this. One Range, No. 4 is ready, all but the painting of the doors and blue washing, and another No. 2, is well advanced, the outer walls being raised 15 feet, the verandahs built, and the inner walls raised 10 feet. The out-houses attached to these two Ranges are about half completed. No. 1 Range has the whole of its basement completed, and the verandah walls and pillars about 10 feet high.

No. 3 Range has its basement completed.

No. 5 Range has its basement half completed.

No. 6 Range has its foundations about three parts laid.

Nos. 7 and 8 Ranges have their foundations completed.

9. Doubts have been entertained of the possibility of obtaining an adequate supply of water on the site of these Barracks, but the Executive Engineer has ascertained by completing one permanent Well, and sinking three trial shafts, that abundance, for the present at least, may be found at a depth of 40 feet. The space enclosed within the Race Course barely contains the 8 Ranges, the Hospital, and all the auxiliary building attached to Barracks of this description, and has no room for Magazines and other additions, and it seems therefore advisable at once to take in and include within the fortified position, more ground on the west side whereon to erect these as well as Quarters for Officers, who surely ought to be provided with accommodation within the defences, instead of without them, as seems to be the intention of the authorities, who have marked out a regular Cantonment, in dangerous proximity to the entrenchment and have, I understand, invited speculators to build.

10. To superintend all these works, involving an aggregate expenditure within the year of three or four lacs of Rupees, and to manage the accounts and correspondence connected with them there is, in my opinion, a very inadequate Establishment attached to the Executive Engineer, the Government having limited the fixed charge to Rupees 399 per mensem. This, though ample as a permanent allowance, is totally insufficient while so many expensive new buildings are in

progress, and the consequence is, that their construction and cost cannot be so closely supervised as they ought to be, nor can the undivided attention of even one individual be given to the Accounts.

OFFICE ESTABLISHMENT.		Rs. A. P.	Rs. A. P.
Arnachellum Moodeliar.....	Writer.....	25 0 0	
Moonesawmy Naidoo.....	Temporary Asst. do.....	10 8 0	
Rungasawmy Moodeliar.....	Draftsman.....	50 0 0	
Coola Pillay.....	Goomastah.....	17 8 0	
Soobroy Pillay.....	do.....	12 8 0	
Annasawmy Moodeliar.....	Store keeper and Act- ing Accountant.....	40 0 0	
Chackry.....	Lascar.....	7 0 0	
Luehmusing.....	do.....	5 8 0	
Abdoofnabby.....	do.....	5 8 0	
Pootah.....	do.....	5 4 0	
Sied Khadar.....	do.....	5 4 0	
Arnachellum Moodeliar.....	Apprentice.....	7 0 0	
			191 0 0
EXECUTIVE ESTABLISHMENT.			
Edward Pereira.....	Overseer.....	80 0 0	
James Holmes.....	Assistant Overseer.....	40 0 0	
W. W. Hebb.....	do.....	25 0 0	
H. Thorp.....	Sub-Overseer.....	25 0 0	
Veerunah.....	do.....	20 0 0	
T. Carrington.....	do.....	15 0 0	
			205 0 0
			396 0 0

OFFICE ESTABLISHMENT.		
1 Draftsman.....	50 0 0	
1 Accountant.....	50 0 0	
1 Deputy Accountant.....	35 0 0	
1 Writer.....	35 0 0	
1 Do.....	20 0 0	
1 Store keeper.....	40 0 0	
1 Goomastah.....	17 8 0	
1 Do.....	12 8 0	
1 Peon.....	7 0 0	
2 Do. at 6 Rupees each.....	12 0 0	
2 Do. at 5½ Rupees do.....	11 0 0	
2 Do. at 4½ Rupees do.....	9 0 0	
		299 0 0

EXECUTIVE ESTABLISHMENT.		
1 Overseer.....	80 0 0	
1 Sub-Overseer.....	20 0 0	
		100 0 0
Total Rupees.....		399 0 0

the buildings on which they are, or may be engaged. I would recommend this arrangement being sanctioned, for it is absolutely necessary that the department of account attached to the Executive Engineer should be strengthened, and I have seen enough to have no doubt that even if no allowance existed in the Estimates for extra superintendence, the cost of competent European Overseers will be more than recovered by the saving effected by them in materials and labour.

Extract of a letter from the Acting Superintending Engineer, Northern Circle, dated 22nd December 1858.

The space enclosed within the Race Course barely contains the 8 Ranges, the Hospital, and all the auxiliary buildings attached to Barracks of this description, and has no room for Magazines and other additions, and it seems therefore, advisable at once to take in and include within the fortified position, more ground on the west side whereon to erect these, as well as Quarters for Officers, who surely ought to be provided with accommodation within the defences instead of without them, as seems to be the intention of the authorities who have marked out a regular Contonment in dangerous proximity to the entrenchment and have, I understand, invited speculators to build.

(Signed) C. A. ORR, Captain,
Ag. Supg. Engr. N. C.

No. 53. ORDER THEREON, No. 631; dated 18th March 1859.

The method of keeping the Cash book of the Executive Engineer at Bangalore, as shewn in para. 2 of Captain Orr's Report, is not satisfactory. In particular the Government notice with displeasure the neglect of the positive rule to enter disbursements at the moment they are made. Again, had the book been balanced daily and compared with the contents of the Cash Chest, as most emphatically ordered by Government, the discrepancy found on examination by Captain Orr could not have occurred.

2. The Government disapprove of the practice of dispensing with the entry of details in the Cash book; thus prepared that book ceases to be a complete record as it ought to be.

3. The payment of the Contractors weekly is not objected to, and there is no rule requiring that articles should be paid for immediately on delivery. But if, as seems likely from the expressions used by Captain Orr, the payments though made weekly are entered as daily, the practice is one which cannot by any means be permitted. The Chief Engineer will furnish explanation on this point without delay, and will also inform Government with reference to para. 1 of the Report, whether there are any other deviations from the prescribed Forms besides those specified by Captain Orr.

4. The Chief Engineer will also obtain and submit full explanation of the outstanding advance of 5,500 Rupees made by Major DeButts referred to in para. 5 of the Report.

5. The alteration in the design of the Cook-rooms and Privies attached to the Married Men's Quarters in the old Dragoon Barracks is fully approved.

6. The Government will await an opinion from the Chief Engineer as to Captain Orr's proposal to demolish entirely the walls of the three ranges yet uncommenced of the old Dragoon Barracks, instead of building on them.

7. The question of strengthening the Establishment of the Executive Engineer of Bangalore has been separately considered.

(Signed) J. D. BOURDILLON,
Secretary to Government.

Central Office of P.W.
Fort Saint George
7th January 1859.

N^o 6849
From The Chief Engineer,
To The Secretary to Government
Public Works Department

Military
Sir,

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Minutes of Consultation N^o 2664, dated 8th December
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ment, a report by Captain Ous, Acting Superintending
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by the Executive Engineer at Bangalore, and on the books
and accounts of that Office.

* dated 22nd Decr
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Government report

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Para III for rebuilding the entire Walls of the old Dragon
Barracks, Captain Mayne will be directed to submit
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3 The inferior nature of the soil of which
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and it will also be drawn to the extremely vicious &
positions of all the houses outside the redoubt thus entirely
masking the whole base.

5 The deficiency of superintendence
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been already referred for report under Ex. Min. Com.
No 2/89, dated 23^d December 1858, and I am awaiting
the receipt of further information from the Executive &
Engineer, I shall not enter on it at present.

Fort Saint George }
7th January 1859... }
I have the honor to be,
Sir,
Your Most Obedt. Servant.

Lt.
S. C. S. Clerk
Wm. Lister Colclough
Chief Engineer

To
The Secretary to Government
O. H. D.

P. W. Department

No. 631

Extract from the Minutes of Consultation

Under date the 18th March 1859

Read the following letter
from the Chief Engineer

(Here entered 7th January 1859. No. 6849)

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Consolidated Cash Book 21 1792
to 21st Dec 1859

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Consolidated Cash Book 21 1792
to 21st Dec 1859

Consolidated Cash Book 21 1792
to 21st Dec 1859

1859

10th March 1859

Consolidated Cash Book 21 1792
to 21st Dec 1859

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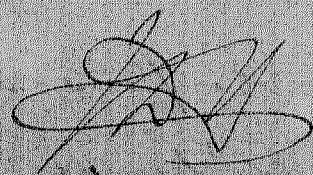
4. The Chief Engineer
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outstanding advance of \$520
Rupees made by Major
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10 Copies to the Chief Eng to Dir 19th
Capt Orr's Report returned
27th Dec 1857

On Com. 14: Nov 28. 1857

21st Nov 1857
22nd Nov 1857

23rd Nov 1857

24th Nov 1857

25th Nov 1857

26th Nov 1857
27th Nov 1857
28th Nov 1857
29th Nov 1857
30th Nov 1857

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19th Dec 1857
20th Dec 1857

1852-53