M.R.O. 1—77,006—6-6-31.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No. 249-250	126	Press / Mis.
Dated	14-1-	1873.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 14th January 1873.

Read the following papers :—

No. 249. From the District Engineer, Bangalore, to the Chief Engineer, Public Works Department, dated Bangalore, 10th December 1872, No. 877.

With reference to your Memorandum of 5th December, I have the honour to report as follows :—

Item No. 5, *Ulsoor Water Works.*—10,000 Rupees of the allotment may be transferred. It is believed the expenditure will reach 40,000 Rupees.

Item No. 6, *Converting old Artillery Barracks into Medical Subordinates' quarters.*—This is approaching completion.

Item No. 7, *New Privies for Royal Horse Artillery.*—One is complete and the other will be finished before the close of official year.

Item No. 8, *Altering and improving Privies for Royal Artillery and Cavalry.*—These works are complete.

Item No. 9, *Privy East end of European Infantry Barracks.*—Half of this work has been given out on contract. The original contractor, Mr. Leonard, carried on his work so slowly that I took the work out of his hands. This was very necessary as he had taken another contract on the Railway, and had practically sublet the contract. His partner stated he would get on with the work more rapidly if the work was given to him. I therefore let him have it. It is getting on a little faster, and I hope will be completed within six weeks. If my expectations are realized, we could complete the whole before the end of March, as I intend to carry out the second half departmentally. I cannot commence the second half till the first is ready for use, as the Regimental authorities cannot, of course, spare the second half, it being required for the use of men. As there is therefore a fair chance of the completion of these works within the official year, I should wish not to give up any of the allotment; should I find later that we cannot finish it, I will at once report.

Item No. 10, *Privy West end European Infantry Barracks.*—The same remarks apply to this work.

Item No. 11, *Improving Privy of Royal Artillery.*—This work is complete.

Item No. 12, *Renewal of the Bakery.*—On the 11th November the plan and estimate for Bakery were forwarded to Superintending Engineer, about a month ago.

The dismantling of the lower story of the bakery is nearly complete, and it would be highly desirable that sanction should be accorded to my taking up the foundations, should I find, after a careful inspection, that this is necessary. If this permission was given, and the plan sanctioned at once, I could spend a good deal of the allotment, but probably not more than 10,000; 4,000 Rupees therefore of the allotment might be transferred, but unless the plan for the bakery is sanctioned very shortly we shall be able to spend but a small proportion even of the 10,000 Rupees.

The transfers which I would recommend therefore stand thus :—

	Rs.
Ulsoor Water Works	10,000
Renewal of the Bakery	4,000
Total...	14,000

No. 249A. From the same Officer, dated Bangalore, 17th December 1872, No. 881.

With reference to the Orders of Government No. 2,959 of 14th December, I have the honour to forward the following report:—

Sanction for the revised estimate was received on 18th May.

Captain Wood, then Executive Engineer, entered on a correspondence with Mr. deClosets regarding the supply of a large quantity of cast-iron piping.

Owing to delay of Mr. deClosets in replying, this correspondence was not concluded till 20th June.

On the 23rd July I took charge of the works from Captain Wood, and up to that time no pipes had been received from Mr. deClosets.

In the month of August, Mr. Smith. Mechanical Engineer, pointed out to me certain alteration by which a large saving might be effected in the quantity of piping.

On this I had comparative estimates and plans drawn up (informing Mr. deClosets of the proposed change, and requesting him to stop work for a time), showing the former plan and the proposed alterations by which a saving would be effected of 5,300 Rupees.

These plans were sent to the Superintending Engineer on 11th September, but sanction was not received till 21st October, although sanction was granted on 5th October.

As soon as I received sanction, I informed Mr. deClosets that the pipes required by us would be much less than the quantity ordered by Captain Wood, and requested him to proceed with the castings with all despatch.

Thus, not only was Mr. deClosets delayed in his work, but the amount of work required was very considerably curtailed.

I may say, however, that Mr. deClosets has not been so prompt in manufacturing what was required as was expected.

About 300 R. feet of 6″ piping have only been received, and he has been urged to proceed more expeditiously with the remainder.

The contract for the new Dhoby's Wells was signed on the 28th June. Since that time almost up to date there has been an unprecedented fall of rain which prevented the contractor from proceeding with the work in a steady manner, and the large quantity of water in the excavation even now delays him considerably.

I trust, however, that as the rains are fairly over, the work will now proceed with more despatch.

Nine wells have been taken down to half the proposed depth, and a large quantity of stone has been collected; but no payments have been made.

The rains this year at Bangalore have been excessive. On the 3rd September nearly 5 inches fell in the course of three hours, and the water of Ulsoor tank rose two feet above the escape, and the calingulah continued to discharge for a fortnight.

Since then the Ulsoor tank water has several times discharged considerably over the calingulah, and the water even now is level with the escape; this has naturally much delayed these works.

This could not be foreseen. Again, the cistern in the European Infantry Barracks was much delayed owing to a change in the design.

On the 13th August the plans and estimate for the proposed cistern were sent to the Superintending Engineer, but the alteration was not sanctioned till the 25th November, and the G. O. sanctioning the change was not received by me till 9th December, a week ago.

Owing to the orders of the Government of India changes had to be made in the iron-work of the wrought-iron cisterns for the Race Course Hospitals; and these alterations having been made, the Superintendent of Public Works Stores was written to on the 27th September to supply the iron-work.

The work is in progress, but no bills have been received.

In the revised estimate for pipes for European Infantry Barracks, a large quantity of 1″ wrought-iron piping was required, and inquiries were made of the Superintendent of Public Works Stores as to whether he could supply them.

The answer was that none were in stock.

Mr. Woolley, the contractor for the Madras Water Works, informed me that he had 1,000 R. feet on hand and would be glad to let me have it; and also proposed to supply the remaining at an early date.

I purchased the 1,000 R. feet as well as a quantity of lead required for the joints, but before closing with Mr. Woolley regarding the remainder of the wrought-iron pipes, I wrote both to Bombay and Calcutta to find out if I could get it cheaper at those places.

None was, however, to be got at either place, and I then requested Mr. Woolley to send me the 4,300 R. feet which I required.

Every effort has been made to spend money, but circumstances have been against it.

I think it would be desirable if some officer deputed by you visited Mr. deClosets' foundry as well as the Public Works Workshop, so that it might be ascertained what progress has been made, and such steps as might be deemed necessary could then be taken to hasten the completion of the works entrusted to them.

I wish to point out that it was considered desirable by the Superintending Engineer and myself that the nine wells now in progress should be completed before the other nine were commenced, and orders have been given accordingly.

It was thought possible that the nine wells would sufficiently improve the Dhoby Wells supply, and it was considered prudent to await the result of their completion.

The balance of estimate at the close of last official year was Rupees 78,796.

In this estimate allowance was made for three wrought-iron cisterns for three male hospitals.

Of these three hospitals only two have been built, and the third cistern* was only entered in the estimate, as at the time a third male hospital was contemplated.

* The estimate for this cistern is Rupees 3,580.

By the re-arrangement of the pipes to supply the European Infantry Barracks, a saving of Rupees 5,300 has been, it is believed, effected.

Again, the pipe to be laid down from the Dhoby Wells to Ulsoor Cistern was estimated at 8″ diameter, but it was afterwards found that 5″ (of which a quantity was in stock) was sufficiently large, and 5″ piping was consequently laid down in place of 8″, and these are now working satisfactorily.

By this plan a further saving of 9,000 Rupees has been effected, making thus a total saving of Rupees 17,880.

It is just possible there may be saving on the new Dhoby Wells of Rupees 5,600 as the nine wells now in progress may be found ample for all requirements.

This I would beg to remark shows how difficult it is in a project of this nature to ascertain beforehand the amount which can profitably be expended, the more so as much of the material, such as cast and wrought-iron piping, lead, cement, etc., cannot be procured in local markets, and their price is constantly changing.

In conclusion, I would respectfully point out that the Executive Engineer in his detail of estimate for original works for 1872-73 applied for 40,000 Rupees for this work, but 10,000 Rupees additional appears to have been entered in the Budget.

I trust I have fully explained the causes which have led to the expenditure being so small.

One of the chief reasons may be stated as due to most of the material, such as piping, cement, etc., being procurable in this country with some difficulty and delay, and I find that suppliers of material are not to be relied on for punctuality.

This unreliability causes doubt to arise in the mind of an Executive Engineer as to his power to spend the money allotted, but he has no certainty for a time, and he can only wait till he is really thoroughly convinced of his inability to spend the money before he takes the steps of reporting the matter to Government.

No. 250. ORDER THEREON, 14th January 1873, No. 126.

ACCOUNT, No. 27.

THE District Engineer's explanation is considered satisfactory. It will be recorded for information of the Government of India, to account for short expenditure of Military allotments, if necessary.

2. The Inspecting Engineer for Buildings will visit Mr. deClosets, foundry and the Government Workshops with a view to ascertain what progress has been made in complying with the orders given to those Establishments. And he will take such measures, in communication with the District Engineer of Bangalore, as may be most likely to result in hastening completion and delivery of the articles required. He will report, for the information of Government, the circumstances under which the contract for cast-iron pipes was given to Mr. deClosets in preference to the Government Workshops; whether owing to inability of the latter Establishment to meet such a call, or to higher prices demanded by it.

3. It is noted that reductions in the total cost of the Ulsoor Water Works, aggregating nearly Rupees 18,000, are anticipated.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the District Engineer, Bangalore.
" Inspecting Engineer for Buildings.
" District Engineer, Presidency.
" Mily Depts

Exd. T. O'Connor.

No. 877 District Engineer's Office
Bangalore 2nd December 1872.

From

The District Engineer
Bangalore

To

The Chief Engineer
Public Works Department
Madras

Sir,

With reference to your Memo of 5th December, I have the honor to report as follows.

Item No. 5. Ulsoor Water Works.

1000 Rupees of the allotment may be transferred. It is believed the expenditure will reach 4000 Rs.

Item No. 6. Converting Old Artillery Barracks into Medical subordinates Quarters. These approaching completion.

Item No. 7. New Privies for Royal Artly. One is complete and the other will be finished before the close of Official Year.

Item No. 8. Altering and improving Privies for Royal Artillery and Cavalry.

These works are complete.

Item No 9. Privy East End of European Infantry Barracks.

Half of this work had been given out on contract. The original Contractor Mr. Leonard carried on his work so slowly that I took the work out of his hands. This was very necessary as he had taken another contract on the Railway and had practically sublet the contract. His part-ner stated he would get on with the work more rapidly if the work was given to him. I therefore let him have it & is getting on a little faster and I hope will be completed within 6 weeks. If my expectations are realized we could complete the whole before the end of March, as I intend to carry on the 2 half departmentally. I cannot commence the 2 half till the first is ready for use, as the Regimental Authorities cannot of course spare the second half it being required for the use of men. As there is therefore a fair chance of the completion of these works within the Official Year. I should wish not to give up any of the Allotment, should I find later that we cannot finish it I will at once report.

Item No. 10. Privy West End European Hospital.

The same remarks to apply to this work.

Item No. 11. Improving privy of Royal Artillery.

This work is complete.

Item No 12. Renewal of the Bakery.

On the 11th November the plan and estimate for Bakery were forwarded to Civil Engineer about a month ago.

The dismantling of the lower story of the Bakery is nearly complete and it would be highly desirable that the sanction should be accorded to my taking up the foundations should I find after a careful inspection that this is necessary. If this permission was given and the plan sanctioned at once I could spend a good deal of the Allotment, but probably not more than 1000 : 4000 Rs, therefore of the allot-ment might be transferred, but unless the Plan for the Bakery is sanctioned very

chiefly we shall be able to spend but
a small proportion even of the 1000 Rs.
The transfers which I would recom-
mend therefore stand thus

Ulsoor Water Works ——— 10000
Renewal of the Bakery ——— 4000
Total ——— 14,000

I have the honor to be
Sir
Your most Obt Servt
H Cadogan Lubbock Capt R.E.
District Engineer Bangalore.

Mr Dillon Esqr

Public Works 1872 Dated 7 Jan 73
From No. 6169
The Dist Engineer
Bangalore
To The Chief Engineer
P. W. D.
Madras
Dated 10 Dec 72
Recd 12 [illegible]

Stating that Rs 14,000
Can be transferred
from the allotment of
Imperial Works
Military for 1872/73.
No 249
No 126. 14 Dec 72/73.

No. 887. District Engineer's Office
Bangalore 7th December 72.

From

The District Engineer
Bangalore.

To

The Chief Engineer
Public Works Department.

Sir

With reference to the Orders of Govt No 2959 of 14 December, I have the honor to forward the following report.

Sanction for the revised estimate was received on 18 May

Captain Wood then Executive Engr entered on a correspondence with Mr Dilloretts regarding the supply of a large quantity of cast iron piping.

Owing to delay of Mr Dilloretts in replying, this correspondence was not concluded till 20 June.

On the 23 July I took Charge of the works from Captain Wood, and up to that time no papers had been received from Mr Dilloretts

In the month of August, Mr. Smith Mechanical Engineer pointed out to me certain alteration by which a large saving might be effected in the quantity of piping.

On this I had comparative estimates and plans drawn up (informing Mr. Déblossetts of the proposed change and requesting him to stop work for a time.) showing the former plan and the proposed alterations by which a saving would be effected of 5,300 Rupees.

These plans were sent to the Superintending Engineer on 11 September but sanction was not received till 2 October. Although sanction was granted on 5 October.

As soon as I received sanction, I informed Mr. Déblossetts that the pipes required by us would be much less than the quantity ordered by Capt. Wood and requested him to proceed with the castings with all despatch.

Thus, not only was Mr. Déblossetts delayed in his work but the amount of work required was very considerably curtailed.

I may however that Mr. Déblosset has not been so prompt in manufacturing what was required as was expected.

About 300 Rft. of 6" piping have only been received, and he has been urged to proceed more expeditiously with the remainder.

The contract for the new Dhoby's well was signed on the 28 June. Since that time almost up to date there has been an unprecedented fall of rain which prevented the contractor from proceeding with the work in a steady manner, and the large quantity of water in the excavation even now delays him considerably.

I trust however that as the rains are fairly over the work will now proceed with more despatch.

Nine wells have been bottomed down to half the proposed depth, and a large quantity of stone has been collected; but no payments have been made.

The rains this year at Bangalore have been excessive. On the 3 September nearly 5 inches fell in the course

hours, and the water of Ulsoor Sank rose 2 feet above the escape, and the Caligula continued to discharge for a fortnight.

Since then the Ulsoor Sank water has several times discharged considerably over the Caligula, and the water even now is level with the escape, this has naturally much delayed these works.

This could not be foreseen. ~~Agn~~ Aggn the cistern in the European Infantry Barracks was much delayed owing to a change in the design.

On the 13 August the plans and estimate for the proposed cistern were sent to the Superintending Engr. but the alteration was not sanctioned till the 25th November and the G. O. sanctioning the change was not received by me till 9th December a week ago.

Owing to the orders of the Govt. of India changes had to be made in the iron work of the ~~wrought~~ iron Cistern

these alterations having been made the Superintendent of Public Works was written to on the 27th September to supply the iron work.

The work is in progress, but no bills have been received.

In the revised estimate for pipes for European Infantry Barracks, a large quantity of wrought iron piping was required, and enquiries were made of the Superintendent of Public Works stores as to whether he could supply them.

The answer was that more were in stock.

Mr. Woolley the contractor for the Madras Water Works informed me that he had 1000 Rft. on hand and would be glad to let me have it, and also proposed to supply the remaining at an early date.

I purchased the 1000 Rft. as well as a quantity of lead required for the joints, but before closing with Mr. Woolley regarding the remainder of

the wrought iron pipes, I wrote both to Bombay & Calcutta to find out if I could get it cheaper at those places.

None was however to be got at either place, and I then requested Mr. Woolley to send me the 4200 Rft. which I required.

Every effort has been made to expend money, but circumstances have been against it.

I think it would be desirable if some officer deputed by you visited Mr. Dilcloset's foundry as well as the Public Works Workshops so that it might be ascertained what progress has been made, and such steps as might be deemed necessary could then be taken to hasten the completion of the works entrusted to them.

I wish to point out that it was considered desirable by the Superintg. Engineer and myself, that the 9 wells now in progress should be completed before the other 9 were commenced and orders have been given accordingly.

It was thought possible that the 9 wells would sufficiently improve the the Dhoby Wells supply, and it was considered prudent to await the result of their completion.

The balance of estimate at the close of last official year was Rs. 78,796.

In this estimate allowance was made for 3 wrought iron cisterns for 3 Male Hospitals.

Of these three Hospitals only two have been built and the 3d Cistern was only entered in the estimate at the time a 3 Male Hospital was contemplated.

By the re-arrangement of the pipes to supply the European Infantry Barracks a saving of 5300 Rupees has been it is believed effected.

Again the pipe to be laid down from the Dhoby Wells to Ulsoor Cistern was estimated at 8 diameter, but it was afterwards found that 6/ of which

timate
iscistern
Rs 3580

large, and 5" pipe was consequently laid down in place of 8", and these are now working satisfactorily.

By this plan a further saving of 9000 Rupees has been effected making thus a total saving of 17,880.

It is just possible there may be saving on the New Dhoby wells of 5,000 Rupees, as the 9 wells now in progress may be found ample for all requirements.

This I would beg to remark shows how difficult it is in a project of this nature, to ascertain before hand the amount which can profitably be expended, the more so, as much of the material such as cast and wrought iron piping, lead, cement &c cannot be procured in local markets, and their price is constantly changing.

In conclusion I would respectfully point out that the Executive Engineer in his Detail & Estimate for Principal Works for 1872/73 applied for 40,000 Rs for this work, but 10,000 Rupees additional appears to have been entered in the Budget.

I trust I have fully explained the causes which have led to the expenditure being so small.

One of the chief reasons may be stated as due to most of the material such as piping, cement &c being procurable in this Country with some difficulty and delay, and I find that suppliers of material are not to be relied on for punctuality.

This unreliability causes doubt to arise in the mind of an Executive Engr as to his power to spend the money allotted, but he has no certainty for a time, and he can only wait till he is really thoroughly convinced of his inability to spend the money before he takes the steps of report

I have the honor to be:
Sir
Your most Obt. Servant
Henry Le Vibart Captain R.E.
District Engr. Bangalore.

P. W. 1892 8 Sept
Irrigation No. 6320.

The Dist. Engr
Bangalore

&

The Chief Engineer
P. W.
Madras

Dated 17th December 92
Rec'd 19th ——

Offering explanations
to the Causes which
have led to the
short expenditure
of the allotment for
Upper Water Project.
No. 126 - 14th Jany 93.

No 24 Sept

No. 126 Read

To: The Engr. Cauvery

Read the following:-

From The Supdg Engr., Bangalore. (No. 877 Irrigation
Do — Do 887 Irrigation

The District Engr.
explanation is considered
satisfactory. It will
be recorded for information
of the Govt of India
to account for short exp.
penditure of Military
allotments, if necessary.

The Inspecting Engr.
for Buildings will visit
Mr. de Glocel's Foundry
and the Government
Workshops with a view
to ascertain what pro-
gress has been made

in complying with
the orders given to those
Establishments. And
he will take such measures,
in communication with
the Chief Engineer
Bangalore as may be
most likely to result
in hastening completion
and delivery of the articles
required. He will report
for the information of
Government the exact
circumstances under which
the Contract for cast
iron pipes was given
to Messrs Derbeare in
preference to the Govern-
ment Workshop, whether
owing

owing to inability
of the latter Establish-
ment to meet such a
call, or to higher prices
demanded by it.

It is noted that
reductions in the total
cost of the Ulsoor Water
Works, aggregating nearly
Rs. 18,000, are anticipa

Engr

25
5

To The Dt Engr Bangalore
" Supdg Engr for Building
" Dt Engr, Residency
" Military Secrett

Dcapr 16/1/73.

Referencer.

Cos 6320 & 6169

Govt. of {1873} Madras.

PUBLIC WORKS.

To The District Engineer
Bangalore

Dated

Recd. Encl.

G. O. 14 July 1873. No 126.

Nos. 249 & 257

Railways Works.

Passing orders on letters
from the D.E. Engr. Bangalore
Submitting proposals
for Land for certain
Railway Works.