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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No. B.P. No.	6127	Press. Mis.
Dated	16-10-1977	197 .

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Archives I—10,006—19-4-79.

[Signature]

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

3rd October 1877, No. 368 I.

Irrigation.
Accounts.

Read the following papers:—

No. 14. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated Camp at Trivellore, 12th June 1877, No. 866.

I HAVE the honor to forward three estimates for embanking the Cortelliar near Tamarapak.

3 Estimates.
3 Longitudinal sections.
3 Cross sections.
2 Survey plans.
1 Masonry plan.

2. The first, amounting to Rupees 2,550, is for enlarging the bank from Velliyur tank to anicut at right bank of river, which has consolidated and sunk in a very extraordinary manner. There appears

no doubt that the original estimate was worked out, but the bank has shrunk in a way that neither Captain Smith nor I can explain; this may be considered repair.

3. The second estimate, Rupees 2,135, is for raising the embankment on the same side of the river slightly and extending it to the left bank of the supply channel to the Cholaveram lake; the line shown in yellow was approved by you, its object is to prevent flood from the river falling into the channel.

4. The third, amounting to Rupees 4,900, is also for raising the old embankment slightly and for extending it to the high ground near Mel Sembedu, which is beyond the levels of all flood.

5. In this estimate is included an item for a short length of bank to protect land under Poothooyeri of Sembedu; it has nothing to do with the Madras Water Works project, but, as I understand that these embankments are not to be charged to that estimate, I have left it, in fact no part of the north flood bank is concerned with the Madras Water Works project. The channel proposed by me from the north end of the anicut completed, will require its protection.

No. 87 CN.

THE undersigned has the honor to request that the Superintending Engineer, Chingleput, will forward a statement showing the estimated quantities and amounts, and quantities paid for and amounts paid on each and all of the estimates for the embankments to the Cortelliar.

- (1.) On the north side above the Tamarapak anicut.
- (2.) On the south side above the anicut.
- (3.) On the south side below the anicut.

FORT ST. GEORGE,
18th July 1877.

(Signed) G. T. WALCH,
Ag. Dy. Chief Engr. for Irrigation.
for Chief Engr. for Irrigation.

From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 24th July 1877, No. 1,558.

In reference to your memorandum, No. 87 CN, dated 18th instant, I have the honor to enclose a statement showing the estimated quantities and amounts, and the quantities paid for and the amounts paid on the estimates for the Cortelliar embankment works, at the Tamarapak

1 Statement.

anicut. One estimate having been sanctioned for the southern embankment both above and below the anicut, the information could not be divided as required in your memorandum as regards the quantities paid for and the amounts paid which have been taken out from the work register (Form B B I), hence the information has been entered for the whole estimate. In regard to the amount of the estimate, I have pointed out that in G.O. No. 1,222 of 7th May 1874 sanctioning the same, it is given by a misprint Rupees 6,290 for Rupees 6,920; adding to the latter amount Rupees 510 for the alterations at the eastern end proposed by the Chief Engineer, raises the estimate to Rupees 7,430 as entered in the statement enclosed.

Statement showing the estimated quantities and amounts, and quantities paid for and amounts paid on the estimates for the embankments to the Cortelliar.

Name of Work.	Items of Estimate.	ESTIMATED QUANTITIES AND AMOUNTS.			QUANTITIES PAID FOR AND AMOUNTS.		
		Quantity.	Amount.	Total.	Quantity.	Amount.	Total.
Northern embankment above anicut.	Earthwork, cubic yards	52,362	3,272 10 7		52,787	3,314 7 5	
	Tamping, do.	52,362	272 11 7		52,197	271 13 9	
	Trimming, do.	35,809	279 12 2		31,457	245 12 2	
	Turfing, square yards	35,809	921 5 9		31,857	795 2 3	
	Compensation for land	..	550 0 0		..	..	
	Contingencies	..	253 7 11		..	160 15 9	
				5,550			4,788 3 4
Southern embankment above and below anicut.	Earthwork, cubic yards	51,222	3,922 9 1		51,221	3,922 7 1	
	Tamping, do.	51,038	398 11 9		51,037	398 11 8	
	Trimming, do.	47,415	246 15 3		41,071	213 14 10	
	Turfing, square yards	47,415	1,394 3 0		45,817	1,416 3 10	
	Compensation for land	..	357 8 11		..	275 7 0	
	Contingencies	..	600 0 0		..	..	
				6,920			
	Alteration at eastern end as per Chief Engineer's memorandum No. 2,340 of 24th March 1874, printed in G.O. No. 1,222 of 7th May 1877.	..	510 0 0		..	..	
				7,430			6,226 12 5

ST. THOMAS' MOUNT,
24th July 1877.

(Signed) F. J. MOBERLY, Colonel, R.E.,
Supg. Engineer, Chingleput.

No. 94 CN.

MEMORANDUM.

WITH reference to letter No. 1,558, 24th July 1877, from the Superintending Engineer, Chingleput, and its enclosures, the undersigned has the honor to request that the estimated quantities and amounts for the south bank Cortelliar may be separated into the portions for the work above and below the anicut respectively.

FORT ST. GEORGE,
1st August 1877.

(Signed) G. T. WALCH,
Ag. Dy. Chief Engr. for Irrigation,
for Chief Engineer for Irrigation.

From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 12th September 1877, No. 2,245.

IN reference to your memorandum No. 94 CN, dated 1st August 1877, I have the honor to inform you that the detailed estimate of Rupees 6,920 for the southern embankment of the Cortelliar is not forthcoming in the records of this or of the range office. As far as I can remember the work done to this embankment in 1874 was all above the anicut.

No. 190 J

MEMORANDUM.

No. 14-A.

THE Superintending Engineer, Chingleput, has submitted three estimates for flood banks in connection with the Cortelliar in the neighbourhood of the anicut which supplies the Madras Water Works. They are —

- | | |
|---|-----------|
| 1. Extending right embankment below anicut to left bank of Cholaveram tank supply channel | Rs. 2,135 |
| 2. Raising right embankment above anicut from Vellyur tank to the head sluice | 2,550 |
| 3. Raising and extending left embankment above anicut; also a short detached flood bank | 4,900 |

2. The first appertains to the Madras Water Works and provides for bringing an existing bank to proper level (3½ feet above flood level of 1874) and section, and for extending it to the channel bank just above the Katankal out-fall or surplus weir. At present floods can find their way round the end of the embankment and into the channel. The left bank of the channel will below this point be the river flood bank.

3. The second estimate requires special notice. In G.O., No. 2,011, dated 15th July 1875, paragraph 6, it was remarked that the want of conformity of the Cortelliar embankments with the sanctioned arrangements has to be explained, and the proper time for submitting explanations should at latest have been when the supplementary estimates for this and the left bank were forwarded for sanction. The circumstance to be explained was the considerable difference between the levels of the banks as designed and provided for in the estimates and indeed paid for and the actual levels. It appears to the undersigned that it was the duty of the Superintending Engineer to go into this matter thoroughly, and to ascertain exactly how the measurements were made, by whom, and by whom they were checked. The Superintending Engineer's explanation, such as it is, will be seen in his letter No. 866 of the 12th June last. He says, this right bank "has consolidated and sunk in a very extraordinary manner. There appears no doubt that the original estimate was worked out, but the bank has shrunk in a way that neither Captain Smith nor I can explain." This statement is not borne out by the information given with the Superintending Engineer's No. 1,558 of the 24th July last, for it is there shown that by no means inconsiderable balances of the estimates remain unexpended.

An endeavour has been made to arrive at the quantity of earthwork required to form one of the embankments to its intended level, and to compare this with the quantities paid for, but the requisite information has not been obtainable from the Superintending Engineer. There was on the right bank a small flood bank, the end of which was not at, but to the east of, the Vellyur tank bund. This was breached and then an embankment with reference to the flood of 1872 was designed. This also though not topped was breached, and lastly a modification both of level and surface fall with reference to the flood of 1874 was found necessary. The reason that the embankments were found out of level as recorded in Proceedings, Madras Government, of the 15th July 1875, No. 2,011, is probably this. The pits were small and not in the pits. and the measurements were, it is most likely, made on the bank and not in the pits. Possibly, too, seeing that the bank appeared to be in good section, the levels were not tested, and it was assumed that its height was correct. The Superintending Engineer has had an opportunity of examining into the matter and he has failed to do so. The Executive Engineer, Captain Smith, was still more closely concerned in the matter, and he has not shown how far he checked the work and in what manner. Whichever way the measurements were made, the first duty was to see that the bank was of the proper height and section, and if bank measurements were adopted they ought to have been reduced to solid measure. Captain Smith appears to the undersigned to have failed in one of the most important duties of an Executive Engineer, as has Colonel F. Moberly in ignoring the essential points into which it was his duty to inquire.

4. The third estimate provides for extending the left flood bank of the river up stream until a proper abutment is found for it at high ground a little more than a mile distant. Also for a small detached piece of bank to save the Sambedu Poothooyeri from extensive inundation.

5. The estimates may be sanctioned as follows:—

ORDINARY AGRICULTURAL.

Irrigation.

Madras Water Works.

1. Connecting right wing of Tamarapak anicut with left bank
of Cholaveram tank supply channel by a flood bank ... rs. 2,135

River embankments.

2. Improving Cortelliar right flood bank above Tamarapak anicut ... 2,550
3. Improving and extending Cortelliar left flood bank above Tamarapak anicut ... 4,900

All balances of former sanctions should be cancelled and the accounts closed.

FORT ST. GEORGE, (Signed) JOHN MULLINS, Colonel, R.E.,
21st September 1877. Chief Engineer for Irrigation.
To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 15. ORDER THEREON, 3rd October 1877, No. 368 I.

The following estimates are sanctioned under Ordinary Agricultural:—

	Main-head.	Name of Work.	Amount.
R. No. 219 I	Irrigation	Madras Water Works. Flood bank from anicut to supply channel.	rs. 2,135
R. No. 220 I	River embankments	Improving Cortelliar right flood bank above Tamarapak anicut.	2,550
R. No. 221 I	Do.	Improving and extending Cortelliar left flood bank above Tamarapak anicut.	4,900

These sanctions have been registered as shown.

2. The absence of definite and detailed information as to the way in which the measurements of the flood banks were taken and by whom checked, is at once condemnatory of Captain A. C. Smith's work as an Executive Engineer, and the omission of the Superintending Engineer to ascertain exactly how the transactions in connection with these embankments were conducted and to make a full report on the subject calls for censure.

3. From the first, as appears from the papers, these embankments have been mismanaged and several mistakes of design committed. To these are now added grave errors in execution without even any serious attempt on the part of the Superintending Engineer to ascertain how they occurred and promptly to apply a remedy.

4. The balances of former sanctions will be considered cancelled.

(True Extract.)

Robert G. ...

Major, R.E.,
Acting Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Chingleput
" Collector of Chingleput.
" Chief Engineer for Irrigation.
" Examiner of Public Works Account
" Revenue Department.

Exd. E. C. Shunker.
Spare Copies

15/10

Revenue Report

No 4400

Mis

IRRIGATION
ACCOUNT.

Govt. of 1877. Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
CHINGLEPUT,
&c., &c., &c.

Dated October 3rd.

Issued.

Recd. 15 October

Encl.

G. O., 3rd October 1877, No. 363 I.

For Miss

OCTOBER

Nos. 14-15.

92618 of Revenue (1877)

Cartelliar in the neighbourhood of the Anicut
which supplies the Madras Water Works, Ching-
leput District—Sanctions with remarks
three estimates for flood banks in connection
with the —

Rs. 6127

Comm to the
Board of Revenue

16 Oct 77

C. M.