

(1) Number of pages 6
(2) Date of repair 25-10-1980
(3) Initials of the Referencer _____

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	2675	Press.
B.P. No.		Mis.
Dated	11.5-1877	197 .

82
2

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
14th April 1877. No. 1,277.

WESTERN DELTA, GODAVERY.
ATTILI CANAL, CLASS I.—WORKS.
Comparative Statement showing the Original and Revised Estimates.

ORIGINAL ESTIMATE.			REVISED ESTIMATE.			Remarks.		
Main-head.	Sub-head.	Items.	Amount.	Total.	Amount.		Total.	
(2) Main Canals and Branches.	B. Land	Compensation ..	Rs. 4,500	4,500	Rs. 4,500	4,500	† Nearly finished. Revised estimate of Rs. 3,000 sanctioned in G.O. No. 2,326 of 19th August 1874.	
		H. Escapes ..	2,550	2,550	3,450	3,450		Savings on estimate, Rupees 150.
	I. Navigation Works.	{	Lock Godicherla at 4th mile ..	14,730		113,372	Actual cost. Finished.	
			Do. Gummumpad at 13½ do. ..	16,770		12,550	Very nearly finished.	
			Do. weir Godicherla at 4th do. ..	4,090		33,996	Actual cost. Finished.	
			Do. do. Gummumpad at 13½ do. ..	1,380	36,170	11,847	Actual cost. Finished.	
	L. Earthworks	{	Earthworks ..	23,610	23,610	**Do. Do.	Do.	
			Improvements to works ..	1,200	1,200		Not required.	
	(3) Distributaries ..	Total, Main Canals and Branches.			68,030		57,252	Actual cost. Finished. Finished. A revised plan and estimate for each sluice sanctioned by District Engineer. † Revised estimates sanctioned by District Engineer. Work nearly finished.
			Head sluice, Relanghi channel	Head sluice, Relanghi channel ..	1,110		1,365	
Dividing dam, ..				3,530		150		
Sluices, eleven ..						4,683		
C. Works		{	Head sluice to Palur channel ..	850		770	Revised estimate includes Rupees 7,360 sanctioned for Relanghi channel, earth-work improvements. See G.O. No. 878 of 2nd April 1875.	
			Do do to Manchall channel ..	920		600		
			Dividing dam, ten ..	1,500		1,600		
			Minor sluices, nineteen ..	2,400		1,200		
L. Earthwork ..		{	Earthwork for distributaries ..	10,300		13,620	10,338	
				6,270	6,270		13,620	
(4) Drainage and Protective works.	Total, Distributaries ..			16,470		23,053	Finished.	
		Amsalapollem under tunnel ..		1,500		690		690
			Grand Total ..		86,000			81,900

* These have nothing to do with the Attili Canal being built under distributaries of the Velpur Canal, and will be shown in the Velpur Canal revised estimate.
(Signed) J. BEATTY, Major, R.E.,
Offg. Superintending Engineer, Godavery.

8th November 1876.

Proceedings of the Madras Government, Public Works Department,
14th April 1877. No. 1,277.

From Lieutenant A. R. F. DORWARD, R.E., Assistant Engineer in charge, Western Delta Division, Godavery District, to Major J. BEATTY, R.E., Officiating Superintending Engineer, Godavery District, dated Godavery, 11th September 1876, No. 245.

I HAVE the honor to forward herewith a revised estimate for Attili Canal.

- 1 Revised estimate.
- 1 Classified abstract of revised estimate.
- 1 Abstract of classified abstract of revised estimate.

Work on this canal has been nearly finished, and with the exceptions of the 100 minor sluices and 10 small dividing dams to channels will soon be completely so. The

revised estimate therefore is almost a statement of actual cost.

As in almost all the canals the "earthwork" improvements were considerably over-estimated, in this case there has been a saving of over Rupees 6,000. The canal has been out out to carry 65,000 cubic yards per hour (see paragraph 14 of Note by Chief Engineer for Irrigation, No. 240 of 22nd November 1870, embodied in G.O. No. 768 of 14th March 1871) instead of the 56,400 cubic yards allowed for in the original estimate. The saving on the original estimate is therefore the more marked. The lock at Godicherla has been finished, and that at Gummumpad only requires a little coping work to be done to one parapet to complete it also. The lock weirs at Godicherla and Gummumpad have both been completed. The surplus weir at 10½ miles has been completed except coping of parapets. The Relinghi channel sluice has been completed. The excess on the original estimate was due to a discharge of 19,500 cubic yards per hour having been allowed for instead of one of 15,000 cubic yards, and to the provision of screw gearing to the shutters.

The two dividing dams at 16th mile are really head sluices to two irrigation channels. Revised plans and estimates were prepared and the works have been nearly finished.

The extra Rupees 1,200 allowed for improving masonry works will not be required. The provision for minor channels, Rupees 13,770, includes Rupees 7,500 sanctioned for improving Relinghi channel in G.O. No. 878 of 2nd April 1875.

In the classified abstract the provision is shown as Rupees 13,620. This is due to Rupees 150 allowed for a dam on the Relinghi channel being shown under head-dividing dams. The original provision of Rupees 3,520 for eleven sluices has been exceeded by about Rupees 1,100. On all canals the provisions for distribution arrangements are too small. This was due to Mr. Randall having generally built brick sluices without screw gearing, and with a capability of discharge of only 2 cubic yards per hour per acre independent of the acreage, and having allowed for similar sluices in his estimates.

Many of these brick sluices are already in bad order, the bricks having been of very poor quality, and will shortly have to be rebuilt. Their vents have in many cases been enlarged. All sluices built in the last five years have been of stone, and the greater number have been provided with screw gearing. Their discharging capability has been in accordance with Circular No. 27 of 30th May 1870 of the Chief Engineer for Irrigation.

In the original estimate there was a provision of Rupees 2,400 for 100 minor sluices. Nothing like that number will be wanted, and it is not possible or rather perhaps no way is known of building an efficient sluice for Rupees 24. A concrete sluice was two years ago built on this canal as an experiment. It has answered very well. It cost Rupees 57. The shutter grooves only were of stone; all the rest of the work being concrete. Nineteen similar sluices are all that it is necessary to provide for direct irrigation. I have therefore entered in the revised estimate a provision of Rupees 1,200 for these sluices.

The tunnel under Amadalapalem channel was not provided for in the original estimate, but was ordered to be charged to it by the District Engineer.

In the original estimate there was a provision of Rupees 1,500 for two under tunnels. These have been built for Rupees 1,403. They have nothing to do with the Attili Canal, being built under distributaries of the Velpur Canal. They were originally entered under Attili Canal by mistake and will be shown in the Velpur Canal revised estimate. The original estimate has therefore been now shown as Rupees 84,500 instead of Rupees 86,000.

*Proceedings of the Madras Government, Public Works Department,
14th April 1877. No. 1,277.*

I have left unchanged the provision of Rupees 4,500 for compensation for land, as I have no idea what has yet to be paid. A considerable area of land was taken up in the years 1873 and 1874 when widening the canal. Statements were in those years sent in the regular way to the Revenue Department, but no compensation for the land occupied has yet been given; at the end of last year I brought this matter to the notice of the Acting Head Assistant Collector. The total payment up to date for compensation of land has been Rupees 74-8-5, and this has been paid for land occupied by irrigation channels or masonry works, not by the main canal improvements.

The revised estimate shows a total saving of Rupees 2,600 on the original one.

No. 172—W.

Note by the Chief Engineer for Irrigation.

THE Superintending Engineer, Godavery, has with his letter No. 2,437 of the 28th November 1876, transmitted for Godavery Western Delta, Attili Canal. sanction a revised estimate for the Attili Canal, the works of which are so far completed as to make the statement a very close approximation to the actual cost of the works.

2. It will be seen that the total of the revised estimate, notwithstanding the large additional cost of the Relanghi distribution channel, is Rupees 4,100 less than the amount of the sanctioned estimate. Of this saving Rupees 1,500 for two under tunnels, or rather their actual cost, will appear as a charge against the Velpur Canal, to which they properly belong, in the revised estimate for that work.

3. The revised estimate is recommended for sanction.

FORT ST. GEORGE, (Signed) JOHN MULLINS, Lt.-Col., R.E.,
2nd April 1877. Chief Engineer for Irrigation.
To the Secretary to Government, Public Works Department.

No. 335.

ORDER THEREON, 14th April 1877, No. 1,277.

IRRIGATION, No. 24.

Account.

THE revised estimate, amounting to Rupees 81,900, for the Attili Canal, Godavery Western Delta, is sanctioned in lieu of that for Rupees 86,000 accord-

ing to the particulars shown in the comparative statement. It is observed that there will be Rupees 4,100 available as a set off against excess expenditure on other works of this delta.

2. This sanction has been registered as No. 7 I of 1877-78.

(True Extract.)

John Mullins

Lt.-Col., R.E.,

Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

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

Exd. E. C. Shunker.
Spare Copies

Revenue Department
No 2431

Govt. of 1877 Madras.

PUBLIC WORKS.

To

✓
The SUPERINTENDING ENGINEER,
GODAVERY,
&c. &c. &c.

7-11-1877

Dated April 14th.

Issued

Recd.

9 May 77

Encl.

G. O., 14th April 1877, No. 1,277.

APRIL

Nos. 334-335.

No 2675

Comm. to the
Board of Revenue

11 May 1877

Attili Canal, Godavery Western Delta.—
The revised estimate amounting to Rupees
81,000 for the —, sanctioned.