M.R.O. 1—20,002—12-8-65.

(1) Number of Pages 6.

(2) Date of repair 11. 10. 68.

(3) Initials of the Referencer [illegible]

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 2615	~~Press~~
~~B.P. No.~~	Mis.
Dated 11. 12. 1875	~~196~~ .

Not to be folded or roughly handled

1/2645

Proceedings of the Madras Governm... Public Works Department,
30th Novemb... 1875.

Read the following ...er :—

No. 1,36...

No. 647. *Note by the Chief Engin... for Irrigation.*

In Government Order of the 16th July last, No. 2,020, an approximate estimate of Rupees 50,000 for the extension of the Pooniar Anicut in South Arcot was sanction...d pending the revision of the ...* and the District Engineer has, after making the necessary alterations in ...t of the wings and head-works, transmitted an amended estimate amountin... Rupees 56,060, and has explained in No. 159, 12th instant. ...ering letter what rates have been rates noticed as being apparently excessive co... capable of reduction, and why other paragraph 15, it is mentioned that the Pomb... ...t be reduced. In the specification, thick; 3 inches will be more than ample. head-sluice shutters are to be 5 inches

2. No further information has been r...ived regarding the revenue under the channels supplied by this anicut.

(Signed) JOHN MULLINS, Lt.-Col., R.E.,
Chief Engineer for Irrigation.

Camp at Royachoty,
19*th November* 1875.

* Of Rupees 57,860.

AGRICULTURAL—CAPITAL—ORDINARY.

Revised Abstract Esti...te of 1875-76.

Class 1, *Pooniar Anicut, South Arcot Dist...ct, Trikalore Taluq, No.* 1 *Range.*

Work.—Lengthening Pooniar Anicut and repairing damages done to the same.

Contents.	Particulars.	Rate. Rs.	A.	P.	Per	Amount. Rs.	A.	P.	Total. Rs.
	ANICUT AND HEAD-WORKS.								
	C.—Masonry Works.								
	Lengthening the Anicut.								
136	Wells of 3 feet inner diameter and 5 feet deep filled with hydraulic concrete	22	8	0	Each.	3,060	0	0	
62	Do. of 3½ do. do. do. ...	24	8	0	„	1,519	0	0	
13,260	Cubic feet, brick in hydraulic mortar.	0	2	2	C. ft.	1,796	10	0	
100 10/27	Cubic yards of concrete do. do. ...	2	8	8	C. yd.	243	7	3	
523 19/27	Do. of rough stone work do.	3	0	0	„	1,570	1	9	
271	Do. of cut stone work do. ...	13	0	0	„	3,523	0	0	
5,760	Do. of rough stone work do.	1	8	0	„	8,640	0	0	
23·80	Squares of plastering two coats render and set	3	6	0	Sqre.	80	5	2	
						20,432	8	2	

WORK.—Lengthening Pooniar ... and repairing damages done to the same.—(*Continued.*)

Contents.	Particulars.	Rate.	Per	Amount.	Total.
		RS. A. P.		RS. A. P.	RS.
	Constructing Under-sluices				
14	Wells of 4 feet inner diam... 6 feet deep filled with concrete	33 0 0	Each.	462 0 0	
115	Do. of 3½ do. do.	28 14 0	,,	3,320 10 0	
22,272	Cubic feet of brick in mortar	0 2 2	C. ft.	3,016 0 0	
336	Do. of archwork in do.	0 2 8	,,	56 0 0	
342	Cubic yards of concrete in ...	2 6 8	C. yd.	826 8 0	
95	Do. of cut stone in ...	13 0 0	,,	1,235 0 0	
674½	Do. of rough stone ... apron	1 8 0	,,	1,012 2 8	
54½	Cubic yards of rough stone ... revetment	1 8 0	,,	81 10 8	
43·46	Squares of plastering two ... of hydraulic mortar	3 6 0	Sqre.	146 10 9	
12	Beam stones	8 0 0	Each.	96 0 0	
6	Teakwood shutters (needles) ... h iron straps round top and bottom complete	62 0 0	,,	372 0 0	
	Cost of eighteen wells which were already sunk, but abandoned to suit revised design	...	...	441 0 0	
	Excavating foundation	...	...	1,200 0 0	
	Temporary dams	...	...	800 0 0	
	Baling water...	...	...	1,600 0 0	
	Sundries and superintendence ...	7 0 0	Cent.	35,098 2 3 / 2,451 13 9	
				37,550 0 0	
	Miscellaneous.				
	Temporary road to quarries	...	...	300 0 0	
	Total, HEAD-WORKS ...	...	...	...	37,850
	MAIN CANAL AND BRANCHES				
	D.—REGULATORS, MASONRY WORKS.				
	Constructing a Head-sluice for Pombay Channel.				
95	Wells 3½ feet inner diameter and 5 feet deep filled with hydraulic concrete	24 8 0	Each.	2,327 8 0	
204	Cubic yards of concrete in hydraulic mortar	2 6 8	C. yd.	493 0 0	
14,102	Cubic feet of brick in do. do. ...	0 2 2	C. ft.	1,909 10 4	
98	Cubic yards of cut stone in do. ...	13 0 0	C. yd.	1,274 0 0	
124	Do. of rough stone wor ...	1 8 0	,,	186 0 0	
954½	Cubic feet of archwork of br... in hydraulic mortar	0 2 8	C. ft.	159 0 6	
35·75	Squares of plastering with tw... ts hydraulic mortar	3 6 0	Sqre.	120 10 6	
20	Beam stones	8 0 0	Each.	160 0 0	
2,016	lbs. of angle iron bearing	0 2 0	lb.	252 0 0	

WORK.—Lengthening Pooniar Anicut and re... ring damages done to the same.—(Concluded.)

Contents.	Particulars.	Rate.	Per	Amount.	Total.
		RS. A. P.		RS. A. P.	RS.
	Constructing a Head-sluice for Pombay Channel.—(Concluded)				
4	Teakwood shutters similar to present ones with screw gearin... Removing old work ...	0 0	Each. ...	800 0 0 / 200 0 0	
				7,881 13 4	
	Guard wall.				
45	Wells of 3½ feet inner diameter 5 feet deep filled with hydra...	8 0	Each.	1,102 8 0	
	concrete	6 8	C. yd.	79 12 0	
83	Cubic yds. of concrete in do. mor...	2 2	C. ft.	1,437 5 0	
10,614	C. feet of brick in hydraulic mor...				
131	Cubic yards of rough stone work ...	8 0	C. yd.	196 8 0	
	apron	8 0	,,	42 0 0	
28	Do. of do. for revetment ...			75 0 0	
22·32	Squares of plastering two coats in h... draulic mortar	3 6 0	Sqre. ...	600 0 0 / 200 0 0	
	Excavating foundation	...	...	400 0 0	
	Temporary dams	...	...		
	Baling water			12,014 14 4	
	Sundries and superintendence ...	7 0 0	Cent.	845 1 8	12,860
	Raising the existing regulating works on the Southern bank.				
5,706	C. feet of brick in hydraulic mortar.	0 2 2	C. ft.	772 11 0	
10	Beam stones	8 0 0	Each.	80 0 0	
				852 11 0	
	Sundries and superintendence ...	7 0 0	Cent.	57 5 0	910
	Total, D—MASONRY WORKS ...	...	...	...	13,770
	F.—Earthworks.				
23,257	Cubic yards of earthwork for north embankment	0 1 3	C. yd.	1,816 15 3	
2,904	Do. of do. for south do. ...	0 1 6	,,	272 4 0	
174	Do. of do. for road slopes ...	0 1 0	,,	10 14 0	
25,501	Do. of do. for south bank of Pombay channel forming river embankment	0 1 0	,,	1,593 13 0	
3,971	Do. of do. for bund behind north abutment and wing of head-sluice and guard wall	0 1 0	,,	248 3 0	
				3,942 1 3	
	Sundries and superintendence ...	5 0 0	Cent.	197 14 9	
				4,140 0 0	
	Planting nanul	...	...	300 0 0	4,440
	Total, F—*Earthworks*...	...	...	...	18,210
	Total of MAIN CANAL AND BRANCHES ...	...	...	...	56,060
	Total amount of estimate ...	...	...	...	

CUDDALORE,
24th November 1875.

(Signed) H. R. MEAD, Major, R.E.,
District Engineer, South Arcot.

Specification Report to accompany estimate for …*ngthening the Pooniar Anicut and repairing the damages done to the same near Trikalore i*… *the Trikalore Talug, South Arcot District.*

1. Amount of estimate, Rupees 56,060.

2. Description.—By the cyclone of M… 1874, the north embankment connecting the anicut with north bank of river was destroyed, …d owing to which the head-sluice of the Pombay channel was destroyed. In consequence of t… heavy rains and continuous freshes in the river, nothing could be done to the repair of these wo…s, and the subsequent freshes of July, September, and October considerably enlarged the bre… l nec…ssitated the following work :—

3. Anicut.—The anicut is to be cons… me line and section as before and extended for a length of 340 or 389 feet inclusive of … uices, and the rough stone apron of 12 feet wide in rear of the anicut which was entirel… away is to be replaced and carried on having a uniform breadth of 27 feet throughout … l to end instead of 12. The apron 12 feet broad is found to be insufficient in the loose … ed of this river.

4. Under-sluice.—An under-sluice of … et vents will be built at the north end of the anicut closing on present river bank. The c… he anicut being called + 20·00, the floors of this sluice will be 14 feet, that is 1 foot belo… present deep bed of river, and 2 feet below apron level, the top of sluice will be horizontal a… level with the crest of the anicut as shown on the plan.

5. Guard Wall.—The north wing wa… under-sluice will form a guard wall to connect the anicut with the north embankment, and will … e carried up to + 32·60, or 12 feet 7 inches above an… crest, as directed by the Chief Engineer … r Irrigation.

6. Pombay Sluice.—The guard wall wi… be pierced by the new Pombay channel head-sluice of 4 vents each of 6 feet, the floor of this sluice will be + 16·00, or level with anicut apron and top of walls + 32·60.

7. Existing Sluices.—The existing sluices on south bank will all be raised to 32·60.

8. Wells.—The foundation to all masonry works will be on wells of different diameters. The wells under the anicut, head-sluice, and guard wall will be sunk 5 feet deep, and all the rest 6 feet filled with hydraulic concrete.

9. Foundation.—Will all be 4 feet deep above the wells, of varying thicknesses to suit circumstances.

10. Masonry.—All masonry will be of brick in hydraulic mortar, except the main floors, which will be of cut stone from 1 foot to 1½ feet thick.

11. Apron.—The anicut apron will consist of 1 foot cut stone on 2½ feet of rubble masonry and 6 inches concrete backed by 27 feet of rough stone 3 feet thick. The surface of the rough stone apron will be placed 1 foot below that of the masonry apron. To under-sluice there will be a cut stone apron in front and rear and in vents 1 foot thick on 1 foot of brick masonry over 2 feet of concrete backed by a rough stone apron 2 feet thick resting on a layer of concrete 1 foot thick to prevent subsidence; on the rear of this again there will be a rubble stone apron 21 feet in width in rear and 3 feet thick, in front there will also be a rough stone apron of 15 feet width laid on a bed of concrete 1 foot thick, the size of stones used will be not less than 2 cubic feet each. To head-sluice the aprons will be similar to those of under-sluice, and protected in rear and front by rubble stone apron as per plan. The guard wall proper will be protected from head-sluice to its junction with north embankment by a rough stone apron 10 feet broad and 3 feet thick to prevent scour, and at the junction there will be stone pitching as shown in plan.

12. Mortar.—To be composed of 1 lime to 1½ of sand and 1 of surki (clay burnt in cakes and ground) carefully ground or pounded; all lime used to be slaked on the work, nothing but mortar of the above description to be used for any part of the work.

13. Concrete.—Will be composed of 1 … f lime, 1 of sand, and 1 of surki to 6 of broken stone from 1 to 1½ inches cube. which will be … mixed dry, *i.e.*, with only so much water as will prevent lime being blown away, when put into … water it must be carefully lowered to the bottom in a bucket and gently tilted out, when possible the water should be removed.

14. Grooves.—To be faced with angle i… nches × 3½ inches for the head-sluice. No grooves required for surplus sluices.

15. Shutters.—All to be of well seasoned … d, those for under-sluice will be baulks or needles properly bounded with iron straps at … d. The shutters for head-sluice will be … shutters 5 inches* thick and worked by … gearing; plans for this will be made … h … tor.

* 3 inches will be ample.

16. Embankment and Nanul.—Will all hav… pes of 3 to 1 and 2 to 1, and the outer slopes will be thickly planted with nanul, as also … nt ground along the foot of embankments for at least 10 yards in breadth.

H. R. MEAD, Major, R.E.,
District Engineer, South Arcot.

Cuddalore,
12*th November* 1875.

No. 648. Order thereon, 30th … ember 1875, No. 3,407.

IRRIGATION, No. 62.

Account.

The revised estimate of Rupees 56,060 … f … he Pooniar Anicut in South Arcot is G.O., No. 2,020, of the 16th July 1875, the … tioned in lieu of the approximate … to be proceeded with. … mate of Rupees 50,000, on which under … tension and improvements were allowed

2. The revenue and other information … alled for in paragraphs 2 and 3 of the above order will be awaited, and its submis… should be expedited as far as may be practicable.

(True Ex… ct.)

Major-General, R.E.,
Secretary to Government.

To the District Engineer, South Arcot.
" Controller of Public Works Accounts.
" Chief Engineer for Irrigation.
" Revenue Department.
" " Board.
" Collector of South Arcot.

Exd. E. C. Shanker.
Spare Copies

Revenue Department

No. 4770

Govt. of {1875} Madras.

PUBLIC WORKS.

THE DISTRICT ENGINEER,
SOUTH ARCOT.
&c., &c., &c.

Dated 30*th November.*

Issued

Recd. 11-12-75 *Encl.*

G. O., 30*th November* 1875, *No.* 3,497.

Ds Pass.

NOVEMBER.

Nos. 647-648

Poonjar Anicut, South Arcot.—The revised estimate of Rupees 56,060 in lieu of the approximate estimate of Rupees 50,000 for the extension and improvements to the —, sanctioned with remarks.

No 2615

Lodged

11: Dec/75