Public Works (1897) Department.

27/1839

G.O., No. 147-8

DATED 12 February 1897

13/2/97

[Despatch Abstract.]

Palar Anicut System: Approving the schedule of works amounting to Rs. 22,300 remaining to be carried out to complete the — and directing that the sanction of the Govt. of India thereto, be applied for.

Palar Anicut System: Forwarding Pros: requesting the sanction of the Govt of India to the schedule of works amounting to Rs 22,300 remaining to be carried out to complete the —.

70/4

40 copies

~~32~~ 38/2 copies with dr[illegible] ~~[illegible]~~ back

F.C. 12/2/97

Indexed. 12/2

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897. *Enclosures*
Regd. } 1897. *Spare copies*

G.O., Nos. 147, 148 I., 12th February 1897.

FEBRUARY.

Palar Anicut System

Forwarding Proceedings requesting the sanction of the Government of India to the schedule of works, amounting to Rs. 22,300, remaining to be carried out to complete the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers :—

Note by the Chief Engineer for Irrigation.

No. 24 I.

In accordance with letter from the Government of India, No. 136, dated 15th May 1895, printed in Proceedings of Madras Government, No. 463 I., dated 1st June 1895, the construction estimate of the Pálár anicut system was closed on the 31st March 1896.

2. In Proceedings of Madras Government, No. 561 I., dated 13th June 1884, embodying the complete revised estimates for the Pálár anicut system, the previous history of the system is described. The estimates then submitted amounted to Rs. 19,93,893, of which Rs. 18,94,915 represented the direct and Rs. 98,978 the indirect charges. These estimates were sanctioned by the Secretary of State in his despatch No. 79 P.W., dated 11th December 1884, printed in Proceedings of Madras Government, No. 85 I., dated 29th January 1885.

3. Under paragraph 7, Chapter VI, Volume II, Public Works Department Code, the sanction for direct charges accorded by the Secretary of State was raised from time to time from Rs. 18,94,915 to Rs. 20,06,790, representing an aggregate supplemental sanction of Rs. 1,11,875.

4. The reasons for this supplemental sanction of Rs. 1,11,875 are summarized below :—

		RS.
G.O., No. 278 I., dated 17th May 1890.	In the proposals sanctioned in G.O., No. 561 I., dated 13th June 1884, certain tanks actually included in the list of component works of the system, were left unsupplied. As it was considered desirable to supply these tanks and also a few others newly proposed to be connected with the system, the sanctioned arrangements for the Kalavai main channel were revised, and the Kukundi branch for supplying the Kukundi and Kerambodi tanks was sanctioned, involving a net increase of	12,085
G.O., No. 83 I., dated 30th January 1891.	The sanctioned rates for constructing a weir and providing a new stone revetment for the Terupakuly tank having been found to be very low, the rates had to be increased resulting in an excess of	2,350
G.O., No. 371 I., dated 12th April 1892.	On the occasion of the flood of the 23rd October 1891, the extreme difficulty in removing the needle shutters in the scouring vents of the Pálár anicut was noticed. Out of 42 vents only two were fully opened before the water rose on the anicut too high for the lascars to remain on it any longer in safety. Screw-gearing shutters were therefore proposed to be fitted in lieu of the needle shutters at a cost of	11,900
G.O., No. 603 I., dated 11th July 1892.	The Kaveripak surplus channel, which is one of the most important of the component parts of the northern section of the system, having been found in 1892 to be practically in the same state as it was before the Pálár anicut was built, it was absolutely necessary to take steps for improving the existing condums (dams) across it, providing additional regulators and head sluices, forming flood banks, widening and deepening existing branch channels and cutting new branches. The estimates sanctioned for effecting these improvements amounted to	62,500
G.O., No. 1002 I., dated 17th November 1893.	A weir and two sluices to the Aureaperamvakam tank were found necessary, the estimated cost being	3,300
G.O., No. 1053 I., dated 2nd December 1893.	Owing to a portion of the line of the Kukundi branch channel having been slightly modified during its execution and to increased rates for earth-work having been found necessary where heavy cutting was met with, an excess outlay was necessary to the extent of	6,750
G.O., No. 652 I., dated 14th August 1895.	No provision having been made for land compensation in the estimate sanctioned in G.O., No. 278 I., dated 17th May 1890, for the Kukundi branch channel, an estimate for land taken up for the branch channel was sanctioned amounting to	5,150
G.O., No. 84 I., dated 24th January 1896.	It having been considered desirable to connect the Kolathur tank with the system and to give an improved supply to Damal tank, estimates for channels to supply Karivedu, Kolathur, Damal and other tanks from the Govindavadi channel of the system were sanctioned aggregating	5,700
G.O., No. 303 I., dated 31st March 1896.	To avoid taking up land belonging to the Prince of Arcot, the sanctioned arrangements for supplying the Nelvoy tank were revised, resulting in an increase of cost of ...	2,140
	Total, supplemental sanction ...	1,11,875

5. From statement A furnished by the Examiner of Public Works Accounts it will be seen that the total * outlay incurred up to the end of 1895–96 amounted to Rs. 19,51,936 or Rs. 54,854 less than the total sanctioned amount; while the schedule of further outlay to be incurred on the system submitted by the Superintending Engineer, IV Circle, with his endorsement, No. 228 I., dated 19th November 1896, amounts to Rs. 22,300 or Rs. 32,554 less than the unexpended balance of the sanctioned provision.

* Direct charges.

6. The subjoined statement exhibits the financial results of the system during and up to the end of 1895–96 :—

Expenditure.	During 1895–96.	To end of 1895–96.	Receipts.	During 1895–96.	To end of 1895–96.
	RS.	RS.		RS.	RS.
Direct charges	47,882	16,64,997	Direct receipts in the Public Works Department	2,062	18,604
Indirect do.	1,194	65,876	Irrigation revenue	2,66,301	66,40,961
Collection charges in the Civil Department	7,867	1,87,641	Share of enhanced land revenue ..	16,033	5,11,414
Total ..	56,943	19,18,514	Total ..	2,84,396	71,70,979
Surplus revenue	1,06,353	13,43,195	*Deduct* portion of revenue assumed to be due to "old irrigation" *less* old maintenance charges ..	1,21,100	39,09,270
Total ..	1,63,296	32,61,709	Total ..	1,63,296	32,61,709

7. The following statement compares the actual extension of irrigation and financial results with those shown in the forecast statements printed in Proceedings of Madras Government, No. 561 I., dated 13th June 1884:—

—		Area irrigated, 1st and 2nd crops.		Revenue.		Working expenses.		Net revenue.	
		Estimate.	Actuals.	Estimate.	Actuals.	Estimate.	Actuals.	Estimate.	Actuals.
		ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
To end of	1882-83 ..	87,403	87,403	13,23,351	13,23,351	7,41,596	7,41,596	5,81,755	5,81,755
For	1883-84 ..	90,000	89,990	1,14,210	1,22,889	41,000	33,660	73,210	89,229
Do.	1884-85 ..	94,000	88,201	1,24,010	1,15,702	43,000	36,479	81,010	79,223
Do.	1885-86 ..	98,000	38,788	1,32,200	1,17,600	45,000	59,361	87,200	58,239
Do.	1886-87 ..	102,700	89,763	1,40,970	1,22,770	47,250	43,892	93,720	78,878
	Total ..	..	..	18,34,741	18,02,312	9,17,846	9,14,988	9,16,895	8,87,324
Do.	1887-88 ..	..	91,479	..	1,21,606	..	61,200	..	60,406
Do.	1888-89 ..	..	97,023	..	1,32,824	..	63,526	..	69,298
Do.	1889-90 ..	..	93,848	..	1,22,469	..	1,01,278	..	21,191
Do.	1890-91 ..	..	97,081	..	1,32,560	..	1,00,718	..	31,842
Do.	1891-92 ..	..	55,626	..	21,756	..	90,703	..	— 68,947
Do.	1892-93 ..	..	97,395	..	1,33,018	..	74,766	..	58,252
Do.	1893-94 ..	..	100,775	..	1,44,105	..	45,356	..	98,749
Do.	1894-95 ..	..	98,375	..	1,37,624	..	58,897	..	78,727
Do.	1895-96 ..	..	104,146	..	1,51,529	..	45,176	..	1,06,353
	Total ..	..	..	..	28,99,803	..	15,56,608	..	13,43,195

8. On the 18th December 1884, the flood in the Pálár river rose 4·80 feet above the crest of the anicut, while the highest flood ever recorded rose 6·35 feet above anicut crest in 1874. The principal damage occasioned by this heavy flood consisted in sixteen shutters (the whole of the shutters of two vents) being washed away, and the third apron, built of loose stone, being much damaged and partly washed away for half the length of the anicut. Two days afterwards the rear slope of the Kaveripak tank bank slipped to a length of 260 feet. These damages were repaired in 1885–86 to which cause the enhanced outlay under working expenses that year is to be attributed. By the cyclone of the 31st October 1888, the Kambakal channel and several tanks fed by it were seriously affected. The Parandoor and Neervalur tanks were much damaged. The heavy outlay incurred during 1889–90 and the subsequent three years is chiefly due to the necessity for repairing these damages. The increase in the working expenses in 1894–95 was due to the works in the North Arcot Division, damaged by the cyclone of November 1893, having been repaired during the following year. The decrease in revenue in 1889–90 was due to the failure of the north-east monsoon and the consequent falling off in the area cultivated with second crop. In 1891–92, owing to the unfavourable character of the season, there was a large decrease in the area irrigated and remissions to the extent of Rs. 95,343 had to be granted.

9. In Proceedings of Madras Government, No. 561 I., dated 13th June 1884, it was estimated that the ultimate area of irrigation would be 102,700 acres for first and second crop combined, producing a gross revenue of Rs. 1,40,970, and a net revenue, after deducting maintenance charges, of Rs. 93,720, or a return of 4·7 per cent. on direct and indirect charges. Comparing the actuals for 1895–96 with these anticipations, there is an improvement in the area irrigated of 1,446 acres, in gross revenue of Rs. 10,559 and in net revenue of Rs. 12,635, which latter amount represents a profit of 5·17 per cent. on the total direct and indirect charges. This improvement may be ascribed to the supplemental expenditure, and there need hardly be any doubt that when the works provided for in the schedule have been completed, some further extension of irrigation will result, though, as already remarked in Proceedings of Madras Government, No. 561 I., dated 13th June 1884, any considerable increase of irrigation is improbable owing to the variable nature of the water-supply.

10. The index map of the system in two sections is enclosed for submission to the Government of India, with this report.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

29th January 1897.

STATEMENT A.

Statement of Outlay on the Pálár Anicut system to end of 1895-96, compared by main and sub-heads with the estimate sanctioned by the Secretary of State in No. 79 P.W., dated 11th December 1894, communicated with G.O., No. 85 I., dated 29th January 1885, and with existing sanctions.

Main and Sub-heads.	Estimate sanctioned by Secretary of State.	Existing sanctions.	Outlay to end of 1895-96.	Difference.	
				2—4.	3—4.
1	2	3	4	5	6
Direct Charges.	RS.	RS.	RS.	RS.	RS.
I. Head-works—					
C. Works	1,963	12,400	10,343	— 8,380	2,057
Total ..	1,963	12,400	10,343	— 8,380	2,057
II. Main Canals and Branches—					
B. Land	5,649	6,749	5,995	— 346	754
D. Regulators	28,992	22,708	22,881	6,111	— 173
E. Falls and weirs	1,11,567	1,04,549	1,01,673	9,894	2,876
F (1) Other crops drainage works.	2,047	866	1,866	181	— 1,000
G. Bridges	8,209	12,449	12,519	— 4,310	— 70
H. Escapes	4,960	5,240	5,239	— 279	1
K. Buildings	..	2,700	2,973	— 2,973	— 273
L. Earth-work	2,03,269	1,88,504	1,88,054	15,215	450
N. Tanks and reservoirs ..	..	7,356	12,040	— 12,040	— 4,684
O. Miscellaneous ..	37,293	37,293	36,944	349	349
Total ..	4,01,986	3,88,414	3,90,184	11,802	— 1,770
III. Distributaries—					
B. Land	50	6,800	2,429	— 2,379	4,371
C. Works	11,005	32,753	26,114	— 15,109	6,639
D. Regulators ..	..	6,004	1,914	— 1,914	4,090
E. Falls and weirs ..	..	4,905	3,257	— 3,257	1,648
F (1) Other crop drainage works.	..	2,381	1,204	— 1,204	1,177
G. Bridges	..	1,146	..	..	1,146
L. Earth-work	5,743	53,639	47,700	— 41,957	5,939
N. Tanks and reservoirs ..	12,727	14,629	8,369	4,358	6,260
O. Miscellaneous	..	3,369	4,163	— 4,163	— 794
Total ..	29,525	1,25,626	95,150	— 65,625	30,476
Provision for unforeseen works ..	2,198	1,222	..	2,198	1,222
Total ..	4,35,672	5,27,662	4,95,677	— 60,005	31,985
Old outlay	10,26,978	10,26,978	10,26,978	..	..
Total works ..	14,62,650	15.54,640	15,22,655	— 60,005	31,985
Establishment ..	3,97,861	4,17,603	3,99,406	— 1,545	18,197
Tools and Plant ..	34,404	34,547	29,875	4,529	4,672
Grand Total ..	18,94,915	20,06,790	19,51,936	— 57,021	54,854
Indirect Charges.					
Capitalization of abatement of Land Revenue	17,147	17,147	22,028	— 4,881	— 4,881
Leave and Pension allowances ..	81,831	81,831	82,024	— 193	— 193
Total, Indirect Charges ..	98,978	98,978	1,04,052	— 5,074	— 5,074
Total, Direct and Indirect Charges ..	19,93,893	21,05,768	20,55,988	— 62,095	49,780

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

22nd September 1896.

CAPITAL, PÁLÁR SYSTEM.

Schedule showing works incomplete or not begun on 31st March 1896, the date of closure of the construction estimate for the **Pálár** Anicut system.

Item number.	Name of work.	Estimate number and date.	Amount of estimate.	Outlay up to 31st March 1896.	Balance required after March 1896.	Remarks.
			RS.	RS.	RS.	
1	Repairs and alterations to Vettankolamkondam and constructing a head sluice.	132 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	3,350	2,045	446	Work completed and completion report sent on 24th August 1896.
2	Deepening and widening the Reddivalam supply channel.	111 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	2,300	1,731	569	To be finished this year.
3	Proposed weir to Vepery big tank.	147 of 1892–93. G.O., No. 603 I., dated 11th July 1892	710	475	100	Completed and completion report sent on 30th May 1896.
4	Constructing a weir to Kondangarai tank.	141 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	1,130	7	1,123	Finished already.
5	Constructing sluice to Vepery small tank.	144 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	330	127	15	Completed and completion report sent on 30th May 1896.
6	Compensation for land taken up for cutting the Reddivalam channel.	115 of 1895–96. G.O., No. 751 I., dated 14th Sept. 1895.	1,100	1,051	209	Revised register No. 113 of 1892–93, G.O., No. 751 I. of 14th September 1895.
7	Constructing a weir to Kalapalampattu Alanthangal tank.	4 of 1896–97. G.O., No. $\frac{307}{A}$ I., dated 31st March 1896.	190	44	164	In hand, will be done this year.
8	Constructing a weir to Vepery small tank.	145 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	680	301	56	Completed and completion report sent on 30th May 1896.
9	Demarcating lands already taken up and to be acquired for improving and repairing the Kaveripak surplus channel.	124 of 1894–95. G.O., No. 754 I., dated 13th Oct. 1894.	340	137	203	Will be done this year.
10	Constructing a lascar's shed near the vented weir of Thakkolam channel.	175 of 1895–96. G.O., No. 1054 I., dated 5th Dec. 1895.	390	58	333	Finished this month (November 1896).
11	Constructing a regulator to Kondangarai tank.	142 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	260	..	260	Finished this month.
12	Proposed regulators in Kolathur and Damal branch channels below Karivedu tank weir.	228 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	570	..	570	Will be done this year.
13	Proposed drop at 10,400 feet below head to Reddivalam channel.	107 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	330	..	330	Work in hand, will be done this year.
14	Proposed under tunnel at 6,260 feet below head to Reddivalam branch channel.	105 of 1892–93. G.O., No. 603 I., dated 11th July 1892.	610	..	610	Will be completed, if possible, this year.
15	Constructing a bye-wash and seven pot sluices in Thorayur channel.	5 of 1896–97. G.O., No. $\frac{307}{A}$ I., dated 31st March 1896.	130	..	130	Work in hand, will be done this year.
16	Compensation for land taken up for Kukundi branch channel.	105 of 1895–96. G.O., No. 652 I., dated 14th Aug. 1895.	5,150	..	5,150	Not known when it will be paid.
17	Cutting Karivedu Kolathur branch channel.	225 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	1,430	..	1,430	Work not begun, land not handed over, will not be done this year.
18	Proposed improvements to the existing head sluice of Karivedu Kolathur channel above drop No. 7 in the Govindavadi channel.	226 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	170	..	170	Work not begun, will not be finished this year.
19	Proposed drop at 5,000 feet below head in Karivedu and Kolathur.	227 of 1895–96. G.O., No. 84 I., dated 24th Jan 1896.	280	..	280	Land not handed over, work not begun, will not be finished this year.
20	Constructing the proposed regulating weir at the crossing of the Avalur supply channel with the Damal channel at 1 mile 7 furlongs below Karivedu tank weir.	229 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	280	..	280	Work in hand, will be finished this year.
21	Improving and strengthening the Avalur channel to supply Damal, &c., tanks.	230 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	1,250	..	1,250	Will be done this year.
			RS.	RS.	RS.	
22	Improvements to the Avalur channel head sluice.	231 of 1895–96. G.O., No. 84 I., dated 24th Jan. 1896.	650	..	650	Will not be done this year.
23	Constructing an under tunnel in the proposed channel from Tennel to Nelvoy tank.	14 of 1896–97. G.O., No. 303 I., dated 31st March 1896.	1,390	..	1,390	Work not begun, no land, will not be done this year.
24	Constructing drop No. 1 in the proposed channel from Tennel to Nelvoy tank.	15 of 1896–97. G.O., No. 303 I., dated 31st March 1896.	290	..	290	Work in hand, will be finished this year.
25	Constructing drop No. 2 in the proposed channel from Tennel to Nelvoy tank.	16 of 1896–97. G.O., No. 303 I., dated 31st March 1896.	180	..	180	Do. do.
26	Constructing a bye-wash in the proposed channel from Tennel to Nelvoy tank.	17 of 1896–97. G.O., No. 303 I., dated 31st March 1896.	260	..	260	Do. do.
27	Cutting a channel from Tennel to Nelvoy tank.	18 of 1896–97. G.O., No. 303 I., dated 31st March 1896.	1,970	..	1,970	Work in hand, will be done this year.
28	Providing a tower head to the high level sluice in Kolathur tank.	....	230	..	230	Approved by Chief Engineer for Irrigation for inclusion in this schedule—*vide* Irrigation Chief Engineer's No. N/30 N.A., dated 19th May 1896. Will be done this year.
29	Providing screw gearing and shutters to the vented weir in Thakkolam channel.	G.O., No. 603 I., dated 11th July 1892.	1,320	902	418	Do. do. No. N/37 N.A., dated 11th July 1896, will be completed, if possible, this year.
	Total, I. Works ..	....	..	..	19,066	
	II. Establishment ..	....	..	..	3,153	
	III. Tools and Plant ..	....	..	..	81	
	Grand Total ..	....	..	..	22,300	

Schedule showing works incomplete or not begun on 31st March 1896, &c.—*cont.*

(Signed) G. B. LAMBERT,
Ex. Engineer, North Arcot Divn.

16th November 1896.

Order—No. 147 I., dated 12th February 1897.

The schedule of works, amounting to Rs. 22,300, remaining to be carried out to complete the Pálár anicut system, is approved.

2. Ordered that a copy of these proceedings and the index map be forwarded to the Government of India, with reference to its letter, No. 136 I., dated 15th May 1895, and with a request that the schedule above referred to may be sanctioned at an early date.

[Here enter No. 148 I., dated 12th February 1897.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
„ Superintending Engineer, IV Circle.
„ Examiner, Public Works Accounts.

Endorsement—No. 148 I., dated 12th February 1897.

Forwarded.

(By Order.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

Exd. A. F. Eccleston.

Construction estimate of the Palar anicut system

H.E.

Public Works (1897) Department

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

EXAMINER,
P. W. ACCOUNT
16 JAN 1897
No ....

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Current No: 1490

10

UNDER date the Recd: 10-2-97
Enclos: 15 + 4/3 plans

READ the following

Print with Statement A & schedule of incomplete works.

Note by the Chief Eng. for Irrigation No 24-I, d/ 25-1-97

In accordance with letter from the Govt of India, no. 136, d/ 15th May /95, printed in P.M.G. no. 463. I, d/ 1st June /95, the construction estimate of the Palar anicut system was closed on the 31st March /96.

2. In P.M.G. no. 561 I, d/ 13th June /84, embodying the complete revised estimates for the Palar anicut system, the previous history of the system is described. The

Issue

Coll.

"I" 9.2.97

8.2.97

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mounted to Rs 19,93,893,
which Rs 18,94,915
presented the direct
Rs 98,978 the indirect
harges. These estimates
were sanctioned by the
Secretary of State in his
Despatch No. 79 P.W. d/
11th Dec/84. printed in
P.W.G. No. 86 I, d/ 29th
Jan/85.

3. Under para 7, chapter VI, Vol II, P.W.D. Code, the sanction for direct charges accorded by the Secretary of State was raised from time to time from Rs 18,94,915 to Rs 20,06,790, representing an aggregate supplemental sanction of Rs 111,875.

4. The reasons
for this supplemental

28

sanction of Rs 111,875 ar
summarized below:—

G.O. No. 278. I
17 May/90.

In the proposals sanctioned in G.O. No. 561 I, d/ 13 June /84, certain tanks actually included in the list of component works of the system, were left unsupplied. As it was considered desirable to supply these tanks & also a few others newly proposed to be connected with the system, the sanctioned arrangements for the Kalavai main channel were revised, & the Kukundi branch for supplying the Kukundi & Kerambodi tanks was sanctioned, involving a net increase of .. Rs 12,085

G.O. No. 83. I
30 Jan/91.

The sanctioned rates for constructing a weir & providing a new stone revetment for the Terupakkuly tank having been found to be very low the rates had to be increased resulting in an excess of . . 2,350

O. No. 371 I, 12 April/92. On the occasion of the flood of the 23rd Oct/91. the extreme difficulty in removing the needle shutters in the scouring vents of the Palar Anicut was noticed. Out of 42 vents only two were fully opened before the water rose on the anicut — too high for the lascars to remain on it any longer in safety. Screw gearing shutters were therefore proposed to be fitted in lieu of the needle shutters at a cost of . . 11,900

G.O. No. 603 I, 11 July/92. The Kaveripak surplus channel which is one of the most important of the component parts of the northern section of the system having been found in 1892 to be practically in the same state as it was before the Palar anicut was built, it was absolutely necessary to take steps for improving the existing condums (dams) across it, providing additional regulators & head sluices, forming flood banks, widening & deepening existing branch channels & cutting new branches. The estimates sanctioned for effecting these improvements amounted to . . . 62,500

G.O. No. 1002 I, 17 Novr/93 A weir & two sluices to the Aureaperambakam tank were found necessary, the estimated cost being . . 3,300

G.O. No. 1053 I, 2nd Decr/93. Owing to a portion of the line of the Kalkundi branch channel having been slightly modified during its execution & to increased rates for earthwork having been found necessary where heavy cutting was met with, an excess outlay was necessary to the extent of . . 6,750

G.O. No. 652 I, 14 Augt/95.	No provision having been made for land compensation in the estimate sanctioned in G.O. No. 278 I, d/17 May/90, for the Kukimdi branch channel, an estimate for land taken up for the branch channel was sanctioned amtg. to . . .	5,150
G.O. No. 84 I, 24 Jan/96	It having been considered desirable to connect the Kolathur tank with the system & to give an improved supply to Damal tank, estimates for channels to supply Kariwedu, Kolathur, Damal & other tanks from the Govindavadi channel of the system were sanctioned aggregating . . .	5,700
G.O. No. 303 I, 31 March/96	To avoid taking up land belonging to the Prince of Arcot, the sanctioned arrangements for supplying the Neloor tank were revised, resulting in an increase of cost of . . .	2,140
	Total supplemental sanction	111,875

5. From statement A. furnished by the Examiner of P.W.A. it will be seen that the total outlay* incurred up to the end of 1895-96 amounted to Rs 19,57,936 or Rs 54,854 less than the total sanctioned amount. While the schedule of further outlay to be incurred on the system submitted by the Supg Eng, IV Circle, with his endorsement, No. 228 I, d/ 19 Nov/96, amounts to Rs ~~22,000~~ 22,300 or Rs ~~32,854~~ 32,554 less than the unexpended balance of the sanctioned provision.

6. The subjoined statement exhibits the financial results of the system during & up to the end of 1895-96:—

*Direct charges

Expenditure	During 1895 96	To end of 1895 96	Receipts	During 1895 96	To end of 1895 96
	Rs	Rs		Rs	Rs
Direct charges	47,882	16,64,997	Direct receipts in the P.W.D	2,062	18,604
Indirect do	1194	65,876	Irrigation revenue	266,301	66,40,961
Collection charges in the Civil Dept –	7,867	187,641	Share of Enhanced land revenue –	16,033	5,11,414
Total	56,943	19,18,574	Total	284,396	71,70,979
Surplus revenue	106,353	13,43,195	Deduct portion of revenue assumed to be due to "old irrigation" less old maintenance charges	121,100	39,09,270
				163,296	32,61,709
Total	163,296	32,61,709			

7. The following statement compares the actual extension of irrigation & financial results with those shown in the forecast statements printed in P. M. G. No. 561 I, 13th June/84:—

5 p

	Area irrigated 1st & 2nd crops		Revenue		Working Expenses		Net Revenue	
	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals
	Acs.	Acs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
~~Actuals~~ To end of 1882-83	87,403	87,403	13,23,351	13,23,351	7,41,596	7,41,596	5,81,755	5,81,755
~~Estimate~~ for 1883-84	90,000	89,990	1,14,210	1,22,889	41,000	33,660	73,210	89,229
1884-85	94,000	88,201	1,24,010	1,15,702	43,000	36,479	81,010	79,223
1885-86	98,000	88,788	1,32,200	1,17,600	45,000	59,361	87,200	58,239
1886-87	102,700	89,763	1,40,970	1,22,770	47,250	43,892	93,720	78,878
Total			18,34,741	18,02,312	9,17,846	9,14,988	9,16,895	8,87,324
1887-88	-	91,479	-	121,606	-	61,200	-	60,406
1888-89	-	97,023	-	132,824	-	63,526	-	69,298
1889-90	-	93,848	-	122,469	-	101,278	-	21,191
1890-91	-	97,081	-	132,560	-	100,718	-	31,842
1891-92	-	55,626	-	21,756	-	90,703	-	–68,947
1892-93	-	97,395	-	133,018 133,020	-	74,766	-	58,251 58,254
1893-94	-	100,775	-	144,105	-	45,356	-	98,749
1894-95	-	98,375	-	137,624	-	58,897	-	78,727
1895-96	-	104,146	-	151,529	-	45,176	-	106,353
Total				2849,863 2899,805		15,56,608		1343,145 13,43,197

8. On the 18th Dec/84, the flood in the Palar river rose 4.80 feet above the crest of the Anicut, while the highest flood ever recorded rose 6.35 feet above anicut crest in 1874. The principal

damage occasioned by this heavy flood consisted in sixteen shutters (the whole of the shutters of two vents) being washed away, & the third apron, built of loose stone, being much damaged & partly washed away for half the length of the anicut. Two days afterwards the rear slope of the Kaveripak tank bank slipped to a length of 260 feet. These damages were repaired in 1885-86 to which cause the enhanced outlay under working expenses that year is to be attributed. By the cyclone of the 31st Oct/88, the Kambakkel channel & several tanks fed by it were seriously affected. The Parandoor & Neervalur tanks were much damaged. The heavy outlay incurred during 1889-90 & the subsequent three years is chiefly due to the necessity for repairing these damages. The increase in the working expenses in 1894-95 was due to the works in the North Arcot Dt. damaged by the cyclone of Nov/93 having been repaired during the following year. The ~~large~~ decrease in revenue in 1889-90 was due to the failure of the North-East monsoon & the consequent falling of in the area cultivated with second crop. In 1891-92 owing to the unfavourable character of the season, there was a large decrease in the area irrigated & remissions to the extent of Rs 95,343 had to be granted.

9. In P.W.G No. 561. I, d/ 13th June /84. it was estimated that the ultimate area of irrigation would be 102,700 acres for first & second crop combined, producing a gross revenue of Rs 140,970, & a net revenue, after deducting maintenance charges, of Rs 93,720, or a return of 4·7 per cent on direct & indirect charges. Comparing the actuals for 1895-96 with these anticipations, there is an improvement in the area irrigated of 1,446 acres, in gross revenue of Rs 10,559 & in net revenue of Rs 12,633, which latter amount represents a profit of 5.17 per cent on the total direct & indirect charges. This improvement may be ascribed to the supplemental expenditure, & there need hardly be any doubt that when the works provided for in the schedule have been completed, some further extension of irrigation will result, though, as already remarked in P.W.G No. 561 I, d/ 13th June/84, any considerable increase of irrigation is improbable owing

to the variable nature of the water supply.

10. The index map of the system in two sections ~~as received from the Supdg Engr, IV circle, with his endorsement, No. [illegible], of 14 Aug 96~~, is enclosed for submission to the Govt of India with this report.

Order thereon No. 147 I of 12.2.97

The schedule of works amtg. to Rs ~~22,000~~ 22300 remaining to be carried out to complete the Palar anicut system is approved.

2. Ordered that a copy of these Procs: & the index map be forwarded to the Govt of India with reference to its letter No. 136 I, dd 15 May 95, & with a request that the schedule above referred to may be sanctioned at an early date.

A.S.H
7.2.97

No. 148 I of 12.2.97

Endorsement.

Forwarded.

J.J.L.
23/1/97

W.H.
29.1.97

[illegible]/97

To
The Chief Engr for I.
Supdg Engr IV Circl
Ex P.W.

I.C.B.
14/2/97

B.R. H.E. 5/2 R 8/2

Statement A.

Statement of outlay on the Palar Anicut System to end of 1895-96 Compared by main and Sub heads with the Estimate sanctioned by the Secretary of State in No: 79 P.W. d/ 11.12.94 Communicated with G.O. No: 853 d/ 29.1.85 and with existing Sanctions

Main and Sub. heads	Estimate sanctioned by secretary of State	Existing Sanctions	outlay to end of 1895-96	Difference	
				2-4	3-4
	2	3	4	5	6
Direct Charges.					
I Head. works.					
C. Works.	1963	12400	10343	-8380	2057
Total	1963	12400	10343	-8380	2057
II Main canals and Branches.					
B. Land.	5649	6749	5995	-346	754
D. Regulators	28992	22708	22881	6111	-173
E. Falls and weirs.	111567	104549	101673	9894	2876
F(1) other crops drainage works.	2047	866	1866	181	-1000
G. Bridges	8209	12449	12519	-4310	-70
H. Escapes.	4960	5240	5239	-279	1
K. Buildings	-	2700	2973	-2973	-273
L. Earth. work.	203269	188504	188054	15215	450
N. Tanks & Reservoirs	-	7356	12040	-12040	-4684
O. Miscellaneous.	37293	37293	36944	349	349
Total	401986	388414	390184	11802	-1770
III Distributaries					
B. Land	50	6800	2429	-2379	4371
C. Works.	11005	32753	26114	-15109	6639
D. Regulators	-	6004	1914	-1914	4090
E. Falls & weirs	-	4905	3257	-3257	1648
F(1) other crop drainage works.	-	2381	1204	-1204	1177
G. Bridges	-	1146	-	-	1146
L. Earth. work.	5743	53639	47700	-41957	5939
N. Tanks and Reservoirs.	12727	14629	8369	4358	6260
O. Miscellaneous.	-	3369	4163	-4163	-794
Total	29525	125626	95150	-65625	30476
Provision for unforeseen works.	2198	1222	-	2198	1222
Total	435672	527662	495677	-60005	31985
old outlay	1026978	1026978	1026978	-	-
Total works.	1462650	1554640	1522655	-60005	31985
Establishment	397861	417603	399406	-1545	18197
Tools & Plant	34404	34547	29875	4529	4672
Grand Total	1894915	2006790	1951936	-57021	54854
Indirect Charges.					
Capitalization of abatement of Land Revenue	17147	17147	22028	-4881	-4881
Leave & Pension allowances.	81831	81831	82024	-193	-193
Total Indirect Charges.	98978	98978	104052	-5074	-5074
Total Direct & Indirect Charges.	1993893	2105768	2055988	-62095	4976

Examiner P. W. Accounts

EXAMINED.
P. W. ACCOUNTS.
16 JAN 1897
No.

P. W. E.4 / 1440/97

CHIEF ENGINEER
FOR IRRIGATION
1 20 AUG 96
No. 58 NA

9

SUPG. ENGINEER'S OFFICE P.W.D.
No. 714 Na
18 NOV. 96
4

Capital Palar System

Schedule showing works incomplete or not begun on 31st March 1896 - the date of closure of the Construction Estimate for the Palar anicut system -

EXAMINER,
P. W. ACCOUNTS.
16 JAN 1897
No ....

Item No	Name of work	Estimate No. and Date	Amount of Estimate	Outlay upto 31st March 1896	Balance required after March 1896	Remarks -
1	Repairs and alterations to Vettankolam Kondam and Constructing a head sluice	132/92-93 G.O. No 603.I. of 11-7-92	3350	2045	446	Wark Completed and Complet on Report sent on 24th Augus 96 ~~Finished already~~
2	Deepening and widening the Reddivalam supply channel	111/92-93 G.O. 603.I. of 11-7-92	2300	1731	569	To be finished this year
3.	Proposed Weir to Vepery big tank	147/92-93 G.O. 603.I. of 11-7-92	710	475	100	Completed and Completion Report sent on 30th May 96 ~~Outlay in 1896-97 being Rs100 finished already~~.
4	Constructing a weir to Kondangarai Tank	141/92-93 G.O. No 603.I. of 11-7-92	1130	7	1123	Finished already Rs940 to end of July -
5	Constructing sluice to Vepery small tank	144/92-93 G.O. No 603.I. of 11-7-92	330	127	15	Completed and Completion report sent on 30th May 96 ~~Outlay in 1896-97 being Rs15 finished~~ -
6	Cutting and embanking Reddivalam supply channel from Reddivalam to Nelvoy	112/92-93 G.O. No 603.I. of 11-7-92	2300 ~~1650~~ Est.	~~645~~	„	Revised as per G.O. No 303.I. of 31st March 96. Work finished -
~~7~~ 6	Compensation for land taken up for Cutting the Reddivalam Channel	115/95-96 G.O. No 751.I. of 14-9-95	1100	1051	209 49	Revised ~~&~~ Register No 113/92-93 G.O. No 751.I. of 14-9-95.

87	Constructing a weir to Kalapalampattu Manthangal tank	4/96-97 G.O. No 307 J./A D/. 31-3-96	190	44	164 ~~146~~	In hand, will be done this year-
98	Constructing a weir to Vepery small tank	145/92-93 G.O. No 603 J. of 11-7-92	680	301	56	Completed & Completion Report sent on 30th May 96. ~~Outlay in 1896-97 being 56 finished-~~
109	Demarcating lands already taken up and to be acquired for improving and repairing the Kavaripak surplus channel	124/94-95 G.O. No 754 J. D/ 13-10-94	340	137	203	Will be done this year
11	Compensation for land in Sakkaramallur Channel	42/90-91	1000	809	"	Completed and Completion report sent on 24th August 1896-
12.	Compensation for land in Peruvalayam Branch Channel	75/92-93 G.O. No 603 J. D/ 11-7-92	500	959	"	— Do — Do — — Do - sent on — Do —
10 13	Constructing a Lascar's shed near the vented weir of Thakkolam Channel -	175/95-96 G.O. No 1054 J. D/ 5-12-95	390	58	333 ~~533~~	Finished this month (November 96)

12

					3218	
11 ~~14~~	Constructing a regulator to Kondangarai Tank	142 / 92-93 G.O. No. 603 I. D/ 11-7-92	260	"	260	Finished this month Nov 1896
12 15	Proposed regulators in Kolathur and Damal branch channels below Harivedu tank weir	228 / 95-96 G.O. No. 84 I. D/ 24-1-96	570	"	570	Will be done this year
13 16	Proposed drop at 10410 ft below head to Reddivalam Channel	107 / 92-93 G.O. No. 603 I. D/ 11-7-92	330	"	330	Work in hand, will be done this year.
14 17	Proposed undertunnel at 6260 ft. below head to Reddivalam branch channel	105 / 92-93 G.O. No. 603 I. D/ 11-7-92	610	"	610	Will be completed, if possible, this year.
15 18	Constructing a byewash and seven pot sluices in Thorayur Channel	5 / 96-97 G.O. No. 307 I. A of 31-3-96	130	"	130	Work in hand will be done this year
16 19	Compensation for land taken up for Kukmdi Branch Channel	105 / 95-96 G.O. No. 652 I. of 14-8-95	5150	"	5150	Not known when it will be paid.

13

17 20	Cutting Harivedu Kalathur Branch Channel	225 / 95-96 G.O. No. 84 I. of 24-1-96	1430	"	1430	Work not begun, land not handed over, ~~won't~~ will not be done this year
18 21	Proposed improvements to the existing head sluice of Harivedu Kalathur Channel above drop No 7 in the Govindavadi Channel	226 / 95-96 G.O. No. 84 I. D/ 24-1-96	170	"	170	Work not begun, ~~won't~~ will not be finished this year.
19 22	Proposed drop at 5000 ft below head in Harivedu and Kalathur	227 / 95-96 G.O. No. 84 I. D/ 24-1-96	280	"	280	Land not handed over, work not begun, ~~won't~~ will not be finished this year
20 23	Constructing the proposed regulating weir at the crossing of the Avalur supply channel with the Damal Channel at 1 mile 7 furlong below Harivedu tank weir	229 / 95-96 G.O. No. 84 I. D/ 24-1-96	280	"	280	Work in hand, will be finished this year.
21 24	Improving and strengthening the Avalur Channel to supply Damal &c tanks	230 / 95-96 G.O. No. 84 I. D/ 24-1-96	1250	"	1250	Will be done this year.
					136.78	

22 25	Improvements to the Avalur Channel Head sluice	231/95-96 G.O. No 84. I. d/24-1-96	650	〃	650	Will not be done this year—
23 26	Constructing an undertunnel in the proposed Channel from Tennel to Nelvoy tank	14/96-97 G.O. No 303. I. d/31-3-96	1390	〃	1390	Work not begun; no land, will not ~~wont~~ be done this year—
24 27	Constructing drop No 1 in the proposed Channel from Tennel to Nelvoy tank	15/96-97 G.O. No 303. I. d/31-3-96	290	〃	290	Work in hand, will be finished this year—
25 28	Constructing Drop No 2 in the proposed Channel from Tennel to Nelvoy tank	16/96-97 G.O. No 303. I. d/31-3-96	180	〃	180	—— Do —— Do —— Do ——
26 29	Constructing a byewash in the proposed channel from Tennel to Nelvoy tank	17/96-97 G.O. No 303. I. d/31-3-96	260	〃	260	—— Do —— Do —— Do ——

27 30	Cutting a Channel from Tennel to Nelvoy tank	18/96-97 G.O. No 303. I. d/31-3-96	1970	〃	1970	Work in hand, will be done this year
28 31	Providing a tower head to the high level sluice in Kolathur Tank		230	〃	230	Approved by Chief Engr for Irrigation for inclusion in the schedule Vide Irrigation Chief Engineer's No IV/30 WA d/19-5-96. Will be done this year—
29 32.	Providing screw gearing and shutters to the vented weir in Thakkolam Channel	G.O. No 603. I. d/11-7-92	1320	902	418	—— Do —— Do —— No IV/37 WA d/11-7-96— will be completed, if possible, this year.

Total I Works — ~~18788~~ 19066
II Establishment — ~~3125~~ 3153
III Tools & Plant — ~~87~~ 81
Grand Total — ~~22000~~ 22300

Supg: Engineer
4th Circle
14/11

Executive Engineer
North Arcot Division
16/11

November 1896

18

P.W. E.12
1440/97

Capital – Palar System

Schedule showing works incomplete or not begun on 31st March 1896 the date of closure of the Construction Estimate for the Palar anicut System

Item No.	Name of Work	Estimate No. and Date	Amount of Estimate	Outlay up to 31st March	Balance after March 1896	Remarks
31	Providing a towerhead to the high level sluice in Kalathur tank		230		19930 0 230 Full amt.	Approved by Chief Engineer for Irrigation for inclusion in this schedule vide Irrigation Chief Engineer's No. $\frac{IV}{30 N.A.}$ of 19-5-96 Will be done ~~ensuing~~ this year
32	Providing screw gearing & shutters to the vented weir in Thakkolam channel	Estimate herewith sent for according sanction Form 6.03 J 7/11 Aug/92	1320	902	? 418 418 20598	—do— —do— $\frac{IV}{37 N.A}$ of 11-7-96 ~~Estimate being revised by E. E.~~

Supdg: Engineer
4th Circle

Executive Engineer
N. A. D.
8/5

SUPG. ENGINEER'S OFFICE P.W.D.
No. 481 Na
12 AUG. 96
Enclo 7
FOURTH CIRCLE.

K 43 Na

SUPG. ENGINEER'S OFFICE P.W.D.
No. 8/1970 d
24 SEP. 96
Enclo
FOURTH CIRCLE.

EX. OFFICE
Regd No 1/529/96
5- OCT. 96
P. W. D.
NORTH ARCOT DIV.

SUPG. ENGINEER'S OFFICE P.W.D.
No. 714 Na
18 NOV. 96
Enclo 3
FOURTH CIRCLE.

EXECUTIVE OFFICE
Regd No 1810 Ch
11 NOV. 96
P.
NORTH ARCOT DIVISION

Schedule.

481 Na

1	Repairs & alterations to Vettaukolam Kondam & Constructing a head sluice	132/92-93 G.O. No. 6033 of 11-7-92	3350	2045	0 446. ~~1305~~ Rs	Work Completed & C.R. Sent on 24/8/96 ~~Rs 50 expended in 1896-97~~ finished already 446 July 96
2	Deepening & widening the Reddivalam supply Channel	111/92-93 G.O. 6033 of 11-7-92	2300	1731	569 Rs	to be finished this year ~~Rs 10~~ ——— July ———
3	Proposed weir to Vepery big tank	147/92-93 G.O. 6032 of 11-7-92	710	475	100 Rs ~~235~~ 100	Completed & C.R. sent on 30-5-96 outlay in 1896-97 being Rs 100. finished already July
4	Constructing a weir to Kondangarai tank	141/92-93 G.O. No. 6033 of 11-7-92	1130	7	1123 ~~1123~~ Rs	finished already. ~~Rs 29 expended in 1896-97~~ 940 to end of July
5	Constructing sluice to Vepery small tank	144/92-93 G.O. No. 6032 of 11-7-92	330	127	15 ~~203~~ Rs 15	Completed & C.R. sent on 30-5-96 Outlay in 1896-97 being Rs 15 finished July
6	Cutting & embanking Reddivalam supply channel from Reddivalam to Nelvoy	112/92-93 G.O. No. 6033 of 11-7-92	2300 -1650 650	645	0 Rs ~~5~~	Revised as per G.O. No. 3083 of 31-3-96 ——— finished
					3440	
7	Compensation for land taken up for cutting the Reddivalam channel	115/95-96 G.O. No. 7513 of 14-9-95	1100	1051	49 ~~I don't know~~	Revised by Reg. No. 113/92-93 G.O. No. 7513 of 14-9-95
8	Constructing a weir to Kalapalampattu Alantangal tank	4/96-97 G.O. No. 3073/A of 31-3-96	190	44	146 ~~146~~ Rs	in hand, will be done this year
9	Constructing a weir to Vepery small tank	145./92-93 G.O. No. 6033 of 11-7-92	680	301	0 ~~77~~ Rs 56	Completed & C.R. sent on 30-5-96. outlay in 1896-97 being Rs 56 finished July
10	Demarcating lands already taken up & to be acquired for improving & repairing the Kaveripak surplus channel	124/94-95 G.O. No. 7543 of 13-10-94	340	137	203 Rs	will be done this year
11	Compensation for land in Tak-Karamallur Channel	42/90-91	1000	809	~~I don't know~~ ~~191~~	Completed & C.R. Sent on 24.8.96
					4408.	

12	Compensation for land in Perunalayam Branch Channel	75 / 92-93 G.O. No. 6032 of 11-7-92	500	959	~~[illegible]~~	Completed & C.R. Sent 24.8.96
13	Constructing a lascar's shed near the united weir of Thakkolam Channel	175 / 95-96 G.O. No. 1054 of 5-12-95	390	58	233 ~~332~~ re	~~[illegible] in 1896-97~~ Finished this month (Nov/96)
14	Constructing a regulator to Kondangarai Tank	142 / 92-93 G.O. No. 6032 of 11-7-92	260	"	260 re	~~[illegible] in 1896-97~~ in June Finished this month
15	Proposed regulators in Kolathur & Damal branch channels below Karinedu tank weir	228 / 95-96 G.O. No. 84 of 24-1-96	570	"	570	16 to end of July ~~[illegible] in 1896-97~~ Work in hand. will be done this year
16	Proposed drop at 10400 ft below head to Reddivalam channel	107 / 92-93 G.O. No. 6032 of 11-7-92	330	"	330	Work in hand. will be done this year
17	Proposed under tunnel at 6260 ft below head to Reddivalam branch channel	105 / 92-93 G.O. No. 6032 of 11-7-92	610	"	5940 610 ~~610~~	Estimate Cancelled Est. No. 14 96-97 for Rs 1390 ~~sanction~~ instead Will [illegible] this year
18	Constructing a byewash & seven pot sluices in Thorayur Channel	5 / 96-97 G.O. No. 307 of 31-3-96	130	"	130	Work in hand, will be done ~~soon~~ this year
19	Compensation for land taken up for Thukundi Branch channel	105 / 95-96 G.O. No. 652 of 14-8-95	5150	"	~~[illegible]~~ 5150	N.A. [illegible]
20	Cutting Karinedu Kalathur Branch channel	225 / 95-96 G.O. No. 84 of 24-1-96	1430	"	1430 1430	Work not begun, land not handed over, won't be done this year
21	Proposed improvements to the existing headsluice of Karinedu Kalathur Channel above drop No. 7 in the Govindavadi channel	226 / 95-96 G.O. No. 84 of 24-1-96	170	"	170 170	Work not begun, won't be finished this year
					~~93400~~	

22	Proposed drop at 5000ft below head in Karinedu and Kalatheer	227/95-96 G.O. No. 843 of 24-1-96	✓ 250	„	13400 Full Amt 280	Land not handed over, Work not begun, won't be finished this year.
23	Constructing the proposed regulating weir at the crossing of the Avalur supply channel with the Danal channel at 1 mile 7 furlong below Karinedu tank weir	229/95-96 G.O. No. 843 of 24-1-96	✓ 280	„	~~0~~ 280	~~Full amt~~, Work in hand. will be finished ~~soon~~ this year
24	Improving & strengthening the Avalur channel to supply Danal &c tanks	230/95-96 G.O. No. 843 of 24-1-96	✓ 1250	„	~~0~~ 1250	~~Full amt~~, will be done ~~soon~~ this year
25	Improvements to the Avalur channel headsluice	231/95-96 G.O. No. 843 of 24-1-96	✓ 650	„	Full Amt 650	~~Full amt~~ will not be done this year.
26	Constructing an under-tunnel in the proposed channel from Tennel to Nelvoy tank	14/96-97 G.O. No. 3039 of 31-3-96	✓ 1390	—	Full amt 1390	~~Full amt~~, Work not begun, no land won't be done this year
27	Constructing Drop No. 1 in the proposed channel from Tennel to Nelvoy tank	15/96-97 G.O. No. 3039 of 31-3-96	✓ 290	„	0 290	Work in hand ~~Full amt~~ will be finished ~~done soon~~ this year
28	Constructing Drop No. 2 in the proposed channel from Tennel to Nelvoy tank	16/96-97 G.O. No. 3039 of 31-3-96	✓ 180	„	~~Full amt~~ 0 150	Work in hand ~~Full amt~~ will be finished ~~done soon~~ this year
29	Constructing a byewash in the proposed channel from Tennel to Nelvoy tank	17/96-97 G.O. No. 3039 of 31-3-96	✓ 260	„	0 260	Work in hand, ~~Full amt~~ will be finished ~~done soon~~ this year
30	Cutting a channel from Tennel to Nelvoy tank	18/96-97 G.O. No. 3039 of 31-3-96	1970	„	0 1970 19950	~~Full amt~~ work in hand will be done ~~soon~~ this year

31	Providing a towerhead to the high level sluice in Kolathur tank		230		230 Full amt.	Approved by Chief Engineer for Irrigation for inclusion in this schedule. vide Irrigation Chief Engineer's No. IV/30 N.A. of 19-5-96 Will be done ~~[illegible]~~ this year
32	Providing screw gearing & shutters to the vented weir in Thakkolam channel	Estimate herewith sent for according sanction. G.O. No. 603 I of 11 July 92	1320	902	? 418 418	—— do —— do —— IV/37 N.A. of 11-7-96 ~~Estimate being revised by C.E.~~

Supg: Engineer
4th Circle

Executive Engineer
N. A. D.
8/5

Report to accompany the Schedule and Index map of the Palar Northern Section.

Estimates amounting in all to Rs 95000 for Repairs & Improvements to the existing channels, Distributaries and other works connected with the surplus channel of the Kaveripak Tank in Palar Northern Section were sanctioned in G.O. No. 603 I dated 11th July 1892.

Rs 50770 under Capital account.—
Rs 44230 under Maintenance & Repairs

EXECUTIVE ENGINEER
Regd. No. 8/524
5-OCT.96
P.W.D.
NORTH ARCOT DIVISION

2. As only about two thirds of the works under Capital account therein sanctioned have been completed on the 31st March 1896, nothing can be said about the increase in revenue beyond the information given in page 7 of G.O. No. 603 I of 11th July 1892, which states that about Rs 3042 would be the increase in revenue when the all the works yet to be done are completed.

3. The works sanctioned in G.O. No. 307/A I & 303 I dated the 31st March 1896 are only revised proposals the details of which were originally included in the Estimates sanctioned in G.O. No. 603 I dated 11th July 1892.

4. Estimate amounting to Rs 5700 sanctioned

sanctioned in G.O. No. 843 dated 24th January 1896 are new works not contemplated originally & they are now under execution.

SUPG. ENGINEER'S OFFICE P.W.D. FOURTH CIRCLE
No. 481 Na
12 AUG. 96
6

CHIEF ENGINEER
FOR IRRIGATION.
20 AUG. 96
No. 43 Na

~~Examiner~~
Executive Engineer
N. A. D.
11/8

SUPG. ENGINEER'S OFFICE P.W.D. FOURTH CIRCLE
No. 714 Na
18 NOV. 96
5

SUPG. ENGINEER'S OFFICE P.W.D. FOURTH CIRCLE
No. 5/1974
9
24 SEP. 96
Encls.

CHIEF ENGINEER
FOR IRRIGATION.
25 NOV. 96
No. 58 NA
7

Report.

P.W. E.5/1490/97

A.V.R.

BACK PAPERS.				FURTHER PAPERS.			
G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
~~143~~ 9	43.NA	19-2-96		Issue	78	CW	2.12.96
				R	105 CN	do	17-12-96
				A	6	20-1-97	

Public Works (1896) Department

CURRENT No. 58 NA

Order

From The Superintending Engineer Fourth Circle

No. 228/9

Dated 19th November 1896

Received 23-11-96

Enclosures (9) nine

Spare copies

SUBJECT.

Palar Anicut System. Returns with remarks duly corrected Schedule of Construction estimates for the–

H.E.J.

BJ
23-11-96

PJ 24-11-96

No 409 Ir.

North Arcot Division office,
17th November 1896.

From,
G. B. Lambert, Esq.,
Executive Engineer,
North Arcot Division,

To,
The Superintending Engineer,
IV Circle.

Sir,

With reference to your Endorsement No 432/NA, dated 26th September 1896, returning with certain remarks the Schedule of the Construction Estimate for the Palar Anicut System, I have the honor to report as follows:–

2. The figures in Column 6 namely, Balance, have been corrected and they now represent the expenditure required to be incurred after 31st March 1896 to complete the works.

3. The probable dates of completion of the works have been noted against each work individually in the Col: of remarks and the date when all the works entered in the Schedule will be finished, may be fixed at 31st March 1898.

4. The balance shewn in red ink against item

item 12 was intended to represent the excess outlay over the estimate amount and it has now been scored out.

5. As the original Schedule is replete with corrections, a fair copy of the same has been submitted along with the original Schedule.

I have &c.,

(Sd) G. B. Lambert,

Executive Engineer.

No. 228/9 dated 19th November 1896.

Copy - Submitted to the Chief Engineer for Irrigation with reference to his memorandum No. 43 NA, d/ 19th Sept 1896.

Encls. 9.

Hammer

Supg. Engineer, 4 Circle

CHIEF ENGINEER
FOR IRRIGATION.
25 ... 96
No. 58 NA

P.W. E.13/1490/97

E. I. Form No. 22—2,000—8-8-96.

GOVT. OF MADRAS. 1897. P. W. DEPT.

CHIEF ENGINEER FOR IRRIGATION.

Madras, 14th January 1897.

OFFICE NOTE No. 11 Enc 3

Circulation Register.

To	From	Despatch Date.	Receipt Date.
C	D.E.I.	15-1-96	

KEEP-WITH.

No. , dated 189 .

Case
6 d/ 20-1-97
138 d/ 25-6-97
197 d/ 10-9-97
1364a d/ 15-9-97

Prior to submission to Government the accompanying Report on the closure of the construction Estimate of the Palar Anicut System is forwarded for your perusal and early return with any remarks you may have to offer.

F. J. W.

D. E. I.