M.R.O. 1—77,006—8-6-37.

(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. 2744 Press Mis.

476-77

Dated 31 · 10 1877

Not to be folded or roughly handled

Roy

No. 476. Read the following letter from the Acting Chief Engineer for Irrigation, to the Secretary to Government, Public Works Department, dated Fort St. George, 28th September 1871, No. 78 :—

I HAVE the honour to submit the following report on the progress made in the works of the Madras Irrigation and Canal Company during the quarter ended 31st March 1871.

Expenditure during the quarter.—The total expenditure for the period under review amounted to Rupees 1,61,885, as compared with Rupees 1,31,261 for the previous quarter. The outlay was principally incurred in connection with the canal works, the anicut and head-works on the Pennair river, and the distribution works.

2. The following is a detailed statement of the items on which the above outlay was made :—

1st Section, Main Canal (including head-works).—Rupees 212-4-7 on the 1st Section, Main Canal, 1 to 17¼ miles, the items being,—

	RS.	A.	P.
Head-works	0	10	8
Waste weir, No. 9	12	4	11
Special Superintendence and Sundries	199	5	0

2nd Section.—Rupees 8,231-15-5 on the 2nd Section from the 17½ to the 32nd mile, the particulars being,—

Earth-work, Cubic yards 14,970	5,169	13	2
Canal walls, ,, ,, 562	2,130	4	0
Puddling the face of Nos. 2, 3 and 4 walls	496	11	4
Bridge, second class, for Poodoor	373	10	5
Aqueduct at Kaderbagh	1	4	0
Contingencies	60	4	6

3rd Section.—Rupees 1,253-14-3 on the 3rd Section from the 33rd to the 43rd mile, the details being,—

Sultanpoor tunnel	1,032	11	3
Contingencies for earth and masonry works	221	3	0

4th Section.—Rupees 223-2-11 on the 4th Section, or miles 44 to 60 of the Canal, namely,—

Bridge No. 2 at 60th mile	60	9	0
Contingencies for earth and masonry works	162	9	11

5th Section.—Rupees 1,977-6-0 on the 5th Section of the Main Canal from the 61st to the 72nd mile, the items being,—

Excavation and embankment	542	2	0
Aqueduct at Terrogopilly	817	8	0
Bridge, second class, at Jootoor	37	8	0
Do., do., at Terrogopilly	544	4	0
Contingencies	36	0	0

6th Section.—Rupees 21,860-8-11 on the 6th Section, or miles 73 to 91, namely,—	Rs.	A.	P.
Excavation and embankment, Cubic yards 630 ...	706	8	8
Catch-water drains	57	6	3
Lock No. 1, regulating	28	8	0
Do. ,, 2, with second-class bridge	237	14	11
Do. ,, 2-A	66	7	6
Do. ,, 3, with one culvert	203	1	0
Do. ,, 4, do. roadway	360	9	0
Do. ,, 5, do.	190	4	8
Do. ,, 6, with three culverts	293	2	4
Do. ,, 7, with culvert roadway	612	3	2
Do. ,, 8, with bridge, second class	344	6	0
Do. ,, 9, do.	249	14	0
Do. ,, 9-A, with three culverts	73	6	0
Do. ,, 10, do.	81	6	0
Do. ,, 11, with bridge, second class	354	2	0
Do. ,, 12, do.	235	1	0
One culvert	5	0	0
Bridge, No. 1, at 75th mile	22	0	0
Do., second class, at Valapanoor	40	8	0
Lock gate	17,668	12	5
Contingencies	30	0	0
7th Section.—Rupees 3,822-5-2 on the 7th Section, miles 92 to 114, for,—			
Embankment and cutting, Cubic yards 581	271	3	11
Regulating lock	848	12	10
Anicut and head-works	8	0	0
Two waste weirs	4	10	8
Bridge, No. 1, 92nd mile	5	8	2
Do., second class, 96th do.	114	0	0
Do., do., 98th do. 50th chain	587	12	5
Do., do., 102nd do. 46th do.	266	15	2
Do., do., 105th do. 9th do.	12	8	0
Do., first class, at Ayaloor	6	0	0
Do., third do., at 108th mile 53rd chain	1,206	9	0
Do., second do., at 110th do. 12th do.	85	0	0
Three culverts	18	2	0
Aqueduct No. 20	6	0	0
Contingencies	381	3	0
8th Section.—Rupees 35,927-6-6 on the 8th Section, miles 112 to 144, the items being,—			
Embankment and cutting	1,493	13	7
Lock of 10 feet lift at 117th mile	392	15	5
Do. do. at 118th do.	789	3	3
Do. do. at 121st do.	92	10	2

	Rs.	A.	P.
Lock of 10 feet lift at 122nd mile	2,158	12	10
Do. do. at 123rd do.	2,292	1	1
Do. do. at 124th do.	2,103	0	10
Do. do. at 125th do.	2,253	8	10
Do. do. at 126th do.	2,189	4	10
Do. do. at 137th do.	2,104	0	11
Do. do. at 115th do.	226	2	1
Do. 8 feet lift at 119th do.	3,138	12	5
Do. 7 do. at 129th do.	86	8	0
Do. 13½ do. at 132nd do.	2,103	0	10
Do. 13½ do. at 136th do.	2,103	0	10
Do. 12 do. at 140th do.	2,173	8	10
Do. 12 do. at 142nd do.	2,103	0	10
Do. 11 do. at 144th do.	2,108	2	11
Bridge, second class, at 114th do.	60	0	0
Bridges at 134th, 135th, and 143rd miles	124	14	0
Two culverts	258	0	0
Waste weir and sluice with waste channel and second-class bridge over channel over first lock	1,000	0	0
Sixteen waste weirs	3,840	6	10
Special Superintendence and Sundries	21	1	11
Store and Store charges	711	3	3
9th Section.—Rupees 11,380-12-8 on the 9th Section, or miles 144 to 178 of the Canal, namely,—			
Earthwork...	4,865	2	11
Head-sluice at Rajoly	13	2	2
Under-sluice at do.	9	0	0
Lock of 8 feet drop at 169th mile	133	5	1
Do. 10 do. at 169th do.	81	13	1
Do. 10 do. at 170th do.	90	14	8
Do. 12 do. at 171st do.	140	7	3
Do. 10 do. at 172nd do.	177	5	8
Do. 10 do. at 174th do.	150	12	8
Do. 8 do. at 174th do.	156	0	1
Do. 10 do. at 176th do.	175	12	1
Do. 13 do. at 177th do.	2,951	8	0
Public road bridge at 150th do.	40	0	0
Do. do. at 158th do.	214	0	0
Two culverts	512	14	2
Over bridge	365	14	2
One waste weir	57	9	2
Puddling bank at 164th mile	239	10	6
Special Superintendence and Sundries for earthwork...	280	15	11
Stores	724	9	1

10th Section.—Rupees 8,061-5-7 on the 10th Section, miles 179 to 186 of the Canal, the particulars being,—

	Rs.	A.	P.
Excavation and embankment	2,768	7	2
Head lock and bridge at Adamapully	746	1	0
Aqueduct over Punkalwunka	6	10	0
Do. at 84th mile 85th chain	18	12	0
Syphon sluice at 183rd mile 75th chain	1,495	8	0
Bridge, second class, at 183rd mile 75th chain... ...	183	10	0
Scouring sluice at Terminus	664	8	9
Bridge over scouring sluice channel under main road to Kurnool	376	8	0
Contingencies for earthworks	690	5	8
Depreciation of tools, plant, etc.	1,110	15	0

Adamapully Anicut.—Rupees 40,103-0-9 on this work, the items being,—

Anicut across the Pennair	34,940	10	5
Under-sluice, south side	1,102	11	9
Head-sluice	335	11	6
Flood banks north side	320	4	7
Stop banks	1,728	0	0
North wing wall	1,585	10	6

Somaisweram Anicut.—Rupees 13-14-0 on the Somaisweram Anicut for Special Superintendence and Sundries.

3. *Distribution Works.*—The outlay on works of distribution was Rupees 25,718-6-6, namely,—

	Rs.	A.	P.
1st Section...	9	0	2
2nd do.	52	1	7
4th do.	4,716	9	3
5th do.	4,298	14	0
6th do.	11,608	13	5
7th do.	156	6	8
8th do.	1,341	15	6
9th do.	3,177	13	5
10th do.	263	12	6

4. *Buildings.*—Rupees 33-1-11 were expended under this head on office, store, and workshop buildings at Kurnool.

5. *Telegraph line.*—Rupees 3,064-10-6 were expended on the telegraph line from Soonkasala to Cuddapah for renewal and repair.

6. *Abstract of Expenditure.*—The following statement shows the expenditure on all works from the commencement to the close of the quarter compared with the sanctioned estimates.

Works.	Amount of Estimate.	Expenditure up to 31st Dec. 1870.	Cost during the quarter ended 31st March 1871.	Total Expenditure.	Add amount transferred to this from other works.	Deduct refunds to this from other works.	Total net expenditure.	Amount. Available.	Amount. Increase of Estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Main Supply.									
Anicut and head-works at Kurnool ...	3,03,080	60,327	.....	60,327	.....	.....	60,327	2,42,753	.....
Do. at Soonkasala ...	4,85,122	4,70,098	1	4,70,099	81	.....	4,70,180	14,942	.....
Do. at Somaisweram ...	1,71,727	66,120	14	66,134	.....	.....	66,134	1,05,593	.....
Do. at Adamapully ...	3,44,440	3,82,249	40,103	4,22,352	446	245	4,22,553	.....	78,113
Aqueduct across the river Hindry ...	2,76,250	2,76,325	.....	2,76,325	.....	.....	2,76,325	.....	75
Canal for one mile from the head-sluice of the Kurnool Anicut	65,000	.....	.....	.....	.....	.....	.....	15,715	.....
Main Canal, 1st Section, 17½ miles	10,73,687	49,285	.....	49,285	.....	1,827	49,285	.....	19,552
Do., 2nd do., 18th to 32nd mile ...	19,63,370	10,93,239	212	10,93,239	7	1,755	10,93,239	.....	539
Do., 3rd do., 33rd to 43rd do. ...	9,75,790	19,63,909	8,232	19,63,909	.....	1,755	19,63,909	.....	.....
Do., 4th do., 44th to 60th do. ...	10,55,521	9,05,988	1,234	9,05,988	4	1,755	9,05,988	69,802	.....
Do., 5th do., 61st to 72nd do. ...	8,80,738	9,79,827	223	9,78,604	1,223	.....	9,79,827	75,694	.....
Do., 6th do., 73rd to 91st do. ...	9,43,427	8,71,007	1,977	8,71,007	.....	.....	8,71,007	9,731	.....
Do., 7th do., 92nd to 114th do. ...	7,48,483	8,40,552	21,851	8,37,610	2,942	.....	8,40,552	1,02,875	.....
Do., 8th do., 115th to 143rd do. ...	7,80,111	6,52,566	3,822	6,50,812	1,785	31	6,52,566	95,917	.....
Do., 9th do., 144th to 178th do. ...	9,45,837	7,76,822	35,927	7,76,770	57	5	7,76,822	3,289	.....
Do., 10th do., 179th to 186th do. ...	2,56,327	7,06,630	11,381	7,05,747	888	5	7,06,630	2,39,207	.....
		1,68,285	8,061	1,76,346	.....	.....	1,76,346	79,981	.....
Total...	1,12,68,910	1,01,76,812	25,719	98,007	7,433	5,623	1,03,11,690	10,55,499	98,279
Distribution.									
Branch Channels and sluices of 1st Section ...	7,003	5,174	1,33,068	1,03,09,880	.....	.....	5,183	1,820	.....
Distribution Works of 2nd do. ...	6,000	4,955	9	5,183	.....	.....	5,007	993	.....
Do. of 3rd do. ...	11,150	10,196	52	5,007	.....	.....	10,196	954	.....
Do. of 4th do. ...	46,777	24,757	14	10,196	.....	.....	29,474	17,303	.....
Constructing a bund across the canal in the 45th mile, 1th Section	76	73	40,103	29,474	.....	.....	73	3	.....
Distribution Works of 5th Section	20,550	891	4,299	73	.....	.....	5,186	15,364	.....
Do. of 6th do.	71,400	21,880	11,699	5,190	.....	4	33,579	37,821	.....
Do. of 7th do.	27,045	176	156	33,579	.....	.....	332	26,713	.....
Do. of 8th do.	19,200	971	1,345	332	.....	.....	2,316	16,884	.....
Do. of 9th do.	15,008	873	3,178	2,316	.....	.....	4,051	10,957	.....
Do. of 10th do.	10,000	.....	264	4,051	.....	.....	264	9,736	.....
Do. at Soonkasala	925	925	.....	264	.....	.....	925	.....	.....
Kurnool town water-supply	1,699	1,417	.....	1,417	.....	.....	1,417	282	.....
Total...	2,36,833	72,288	25,719	98,007	.....	4	98,003	1,38,830	.....

Works.	Amount of Estimate.	Expenditure up to 31st Dec. 1870.	Cost during the quarter ended 31st March 1871.	Total Expenditure.	Add amount transferred to this from other works.	Deduct refunds to this from other works	Total net Expenditure.	Amount. Available.	Amount. Increase of Estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Buildings.									
Central Hospital, with out-houses and compound wall, at Kurnool	5,050	4,781	.....	4,781	.....	.....	4,781	269	.....
Repairs to do.	68	60	.....	60	.....	.....	60	8	.....
Overseer's hut at Kurnool...	1,245	.....	.....	.....	.....	.....	.....	1,245	39
Office, Store-house, and Workshop at Soonkasala.	5,947	5,986	.....	5,986	.....	.....	5,986	.....	.....
Powder Magazine, Store, and Station roads at Bowanasey	4,359	4,359	.....	4,359	.....	.....	4,359	423	.....
Office, Store-room, and Artificers' shed at do. ...	7,208	7,523	.....	7,523	.....	.....	7,523	.....	.....
Repairing the above buildings at do. ...	618	318	.....	318	.....	.....	318	260	.....
Improvement of the road approaching to the above buildings, and repairing culverts at do.	578	.....	.....	.....	.....	.....	.....	396	20
Converting the unfinished building intended for a Gun Powder Manufactory into a Hospital at Bowanasey	427	31	.....	31	.....	.....	31	.....	659
Office and Store building at Valapanoor in do. ...	1,970	1,990	.....	1,990	.....	.....	1,990	.....	.....
Do. do. at Jupad in Nagatoor Division ...	4,123	4,782	.....	4,782	.....	.....	4,782	144	.....
Do. do. at Puggydial in do. ...	3,977	3,833	.....	3,833	.....	.....	3,833	5	.....
Do. do. at Chintagonta in Koondaur Division.	5,283	5,278	.....	5,278	.....	.....	5,278	575	.....
Do. do. at Chintagonta in Koondaur Division.	612	67	.....	67	.....	.....	67	19	.....
Do and temporary Store-shed at Ayalore in do.	327	308	.....	308	.....	.....	308	16,087	.....
Repairs to Anicut Office at Zorapore	30,612	14,492	.....	14,525	.....	.....	14,525	160	.....
Office, Store, and Workshop at Kurnool	15,328	15,168	.....	15,168	.....	.....	15,168	.....	.....
Iron and Brass Foundry at do.	.....	.....	.....	.....	.....	.....	.....	675	.....
Room for receiving and despatching stores at do....	1,236	561	.....	561	.....	.....	561	57	.....
Quarters for Sub-Assistant Engineers and Assistant Surveyors at Koondaur	4,980	4,923	.....	4,923	.....	.....	4,923	.....	.....
Engineer's bungalow at Dhoor	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total...	91,098	74,460	33	74,493	.....	.....	74,493	20,323	718
	49,440	55,609	3,065	58,674	100	207	58,567	.....	9,127
Line of Telegraph	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Total...	1,16,19,281	1,03,79,169	1,61,885	1,05,41,054	7,533	5,834	1,05,42,753	12,14,662	1,08,124

Quarter's Expenditure.—It will be remarked that the expenditure of the quarter is shown to have been Rupees 1,61,885, and the net total outlay up to 31st March 1871 Rupees 1,05,42,753.

7. *Excess Expenditure.*—The subjoined statement shows the expenditure in excess of sanction at the end of the quarter to have been Rupees 1,08,124:—

Works.	Excess expenditure up to 31st Dec. 1870.	Excess expenditure during the quarter ended 31st Mar. 1871.	Total.	Add transferred to this from other works.	Deduct refunds.	Excess net expenditure on 31st Mar. 1871.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Main Supply.						
Hindry Aqueduct...	75	...	75	...	...	75
Anicut and head-works at Adamapully ...	37,809	40,103	77,912	446	215	78,113
Main Canal, 1st Section	21,160	213	21,372	7	1,827	19,552
Do., 2nd do.	...	2,294	2,294	...	1,755	539
Total...	59,044	42,609	1,01,653	453	3,827	98,279
Buildings.						
Office, Store-house, and Workshop at Soonkasala	39	...	39	...	...	39
Do. do. at Valapanoor ...	20	...	20	...	...	20
Do. do. at Jupad ...	659	...	659	...	...	659
Total...	718	...	718	...	...	718
	6,169	3,065	9,234	100	207	9,127
Line of Telegraph	65,931	45,674	1,11,605	553	4,034	1,08,124
Grand Total...						

8. *Preparation of Revised Estimates.*—All excess expenditure shown in the foregoing statement, with the exception of that on the 2nd section, has already been reported upon in the Progress Report for the last quarter, and the Agent has been requested to submit a supplemental estimate for the excess on the 2nd section.

9. *Estimates submitted to Government during the quarter.*—The following estimates were received from the Agent and submitted to Government during the quarter:—

		Rs.
(1.)	Bill of cost for erecting Bankers' and Sluice Lascars' huts	58
(2.)	Plans and estimates of Calingulah No. 13 at 24th mile, 2nd Section	6,130
(3.)	Do. for waste weir and surplus channel in the 10th Section	290
(4.)	Supplemental estimate for additional repairs to slips in the 24th mile, 2nd Section	3,480
(5.)	Plan and estimate for a masonry protection of the toe of the return bund near Ulloor, 3rd Section ...	1,470

Estimates sanctioned.—Of these the first four received the sanction of Government during the quarter and the last one was since sanctioned, as also the four following estimates which were previously submitted, namely,—

(1.) Plan and estimate for repairing breaches of August 1870.
(2.) Do. do. for repairing slips in the 4th Section, Main Canal.
(3.) Do. do. for clearing silt in the first five miles of the Canal during 1871-72, and
(4) Plan and estimate for Distribution works, 10th Section.

Proceedings of the Madras Government, Public Works Department,
31st October 1871.

10. *Cost of Establishments.*—The cost of Executive permanent establishments amounts for this quarter to 18·46 per cent. on the expenditure for construction; that of the temporary establishments to 0·97 per cent., and that of the General Management to 12·84 per cent.

Total cost of Establishments.—The total cost of the permanent establishment was, therefore, 31·30, and of temporary establishments 0·97 per cent. on the expenditure.

No. 477. ORDER THEREON, 31st October 1871, No. 2,744.

IRRIGATION, No. 28.

ORDERED that this report be forwarded to the Home Government.

(True Extract.)

5'

PUBLIC WORKS DEPARTMENT.

No. 25 of 1871.

TO THE RIGHT HONOURABLE
THE SECRETARY OF STATE FOR INDIA.

MY LORD DUKE,—We have the honour to forward the accompanying report on the progress of the works of the Madras Irrigation and Canal Company during the quarter ending 31st March 1871.

Proceedings dated 31st October 1871, No. 2,744.

We have the honour to be,
My Lord Duke,
Your Grace's most obedient,
humble servants,

FORT ST. GEORGE,
6th *November* 1871.

Exd. E. C. Shunker.

FORT SAINT GEORGE.

PUBLIC WORKS DEPARTMENT.

Letter to the Right Honourable the Secretary of State for India.

Dated 6th November
No. 25 of 1871.

FORWARDING the report on the progress of the works of the Madras Irrigation and Canal Company during the quarter ended 31st March 1871.

Office of the Chief Engineer for Irrign & Joint Secretary to Government

Fort St George 28th Septr 1871

No. 78

From The Acting Chief Engineer for Irrigation and Joint Secy to Government

To The Secretary to Government

I have the honor to submit the following report on the progress made in the works of the Madras Irrigation and Canal Company during the quarter ended 31st March 1871.

Expenditure during the Quarter.

The total expenditure for the period under review amounted to Rs 161885 as compared with Rs 131261 for the previous quarter. The outlay was principally incurred in connection with the Canal works, the Anicut and Head works on the Pennair river and the distribution works.

2. The following is a detailed statement of the items on which the above outlay was made

Rupees 212-4-7 on the 1st Section Main Canal 1 to 17¼ miles the items being:- — 1st Section Main Canal (including head works).

Head works	Rs	10-8
Waste weir No 9		12-4-11
Special Superintendence and Sundries		199-5--

Rupees 8231-15-5 on the 2nd Section from the 17¼ to the 32nd mile the particulars being:- — 2nd Section.

Earth work	C Yds 14270	Rs	5169-13-2
Canal walls	562		2130-4--
Puddling the face of Nos 2,3,4 walls			496-11-4
Bridge 2nd Class for Pondoor			379-10-5
Aqueduct at Kader Bagh			1-4--
Contingencies			60-4-6

Rupees 1253-14-3 on the 3rd Section from the 33rd to the 43rd mile the details being:- — 3rd Section

Sultanpoor Tunnel	Rs	1032-11-3
Contingencies for Earth & Masonry Works		221-3--

Rupees 223-2-11 on the 4th Section on miles 44 to 60 of the Canal viz:- — 4th Section

Bridge No 2 at 60th mile	Rs	60-9--
Contingencies for Earth & Masonry Works		162-9-11

Rupees 1977-6-- on the 5th Section of the main Canal from the 61st to the 92nd mile, the items being:- — 5th Section.

Excavation and Embankment	Rs	542-2--
Aqueduct at Veroygopully		817-8--
Bridge 2nd Class at Pondoor		37-8--
Do Do Veroygopully		544-4--
Contingencies		36--

Rupees 21860-8-11 on the 6th Section on miles 93 to 91 viz:- — 6th Section

Excavation and Embankment	C Yds 6320	Rs	706-8-8
Waste water drain			57-6-3
Lock Type Reputating			28-8--
Do with 2nd Class Bridge			237-14-11
Do with 2nd Class Bridge			66-7-6
Do with 2nd Class Bridge			243-1--
Do with one culvert			360--
Do Do Roadway			192-4-8
Do 5 Do			293-2-4
Do 6 with 3 Culverts			612-13-2
Do 7 with Culvert roadway			144-6-11
Do 8 with Bridge 2nd Class			249-14-3
Do 9 Do			73-6--
Do 9A with 3 Culverts			81-6--
Do 10 Do			354-2--
Do 11 with Bridge 2nd Class			235-1--
Do 12 Do			5--
One Culvert			

Bridge No 1 at 75th mile	Rs	22 – –
do 2nd Class at Valapanoor	"	40 – 8
Lock Gate		17668 – 12 – 5
Contingencies		30
Rupees 3822 – 5 – 2 on the 7th Section, miles 92 to 114 for		7th Section
Embankment and Cutting C Yds 581	Rs	271 – 3 – 11
Regulating Lock		842 – 12 – 10
Anicut and Head Works		8 – –
Two waste Weirs		4 – 10 – 8
Bridge No 1. 92nd mile		5 – 8 – 2
do 2nd Class at 96th mile		114 – –
do do 98th 56 Ch		587 – 12 – 5
do do 102nd 46		266 – 15 – 2
do do 105th 9		12 – 8 – –
do 1st Class at Ayalore		6 – – –
do 2nd 108 miles 3½ Ch		1206 – 9 – –
do 2nd 110th 12		85 – 4 – –
Three Culverts		18 – 9 – –
Aqueduct No 20		6 – – –
Contingencies		381 – 3 – –
Rupees 35927 – 6 – 6 on the 8th Section miles 115 to 143 the items being,		8th Section
Embankment and Cutting	Rs	1493 – 13 – 7
Lock of 10 feet lift at 117th mile	Rs	892 – 15 – 5
do 118th		709 – 3 – 3
do 121st		92 – 10 – 2
do 122nd		2158 – 12 – 10
do 123rd		2292 – 1 – 1
do 124th		2103 – – 10
do 125th		2253 – 8 – 10
do 126th		2189 – 4 – 10
do 137th		2104 – – 11
do 115th		226 – 2 – 1
do 8 feet lift 119th		3158 – 12 – 3
do 7 " 129th		86 – 8 – –
do 13½ 132nd		2105 – – 10
do 13½ 135th		2105 – – 10
do 12 140th		2773 – 8 – 10
do 12 142nd		2103 – – 10
do 11 144th		2108 – 2 – 11
Bridge 2nd Class 114th		60 – – –
Bridges 2nd Class at 134th, 135th and 143rd miles		324 – 14 – –
Two Culverts		250 – – –
Waste weir and Sluice with waste channel and 2nd Class bridge over channel over rock		1000 – – –
Sixteen waste weirs		3840 – 6 – 10
Special Superintendence and Sundries		21 – 1 – 11
Store and Store charges		711 – 3 – 3
		9th Section

Rupees 11380-12-8 on the 9th Section or 9th Section
Miles 144 to 178 of the Canal namely:-

Earth work	Rs	4865-2-11
Head Sluice at Rajoly	"	13-2-2
Under Sluice do	"	9--
Lock of 8 feet drop at 169th mile	"	133-5-1
Do 10 "	169th "	81-13-1
Do 10 "	170th "	90-14-8
Do 12 "	171st "	140-7-3
Do 10 "	172nd "	177-5-8
Do 10 "	174th "	150-12-8
Do 8 "	174th "	156--1
Do 10 "	176th "	175-12-1
Do 13 "	177th "	2951-8--
Public road bridge at 150th	"	40--
Do Do	158th "	214--
Iron Culverts	"	512-14-2
Over bridge	"	385-14-2
One waste weir	"	57-9-2
Puddling bank at 164th mile	"	239-10-3
Special Superintendence and Sundries for Earth work	"	280-15-11
Stores	"	724-9-1

Rupees 8061-5-7 on the 10th Section, 10th Section
Miles 179 to 186 of the Canal the particulars being:-

Excavation and Embankment	Rs	2768-7-2
Head Lock and Bridge at Adimapully	Rs	746-1--
Aqueduct over Punkalowuka	"	6-10--
Do at 84th mile-05 ch.	"	10-12--
Syphon Sluice 183rd " 75	"	1495-8--
Bridge 2nd class 183rd " 75	"	183-10--
Scouring Sluice at Terminus	"	664-8-9
Bridge over Scouring Sluice channel under main road to Kurnool.	"	376-8--
Contingencies for Earthworks	"	690-5-8
Depreciation of Tools Plant &c.	"	1110-13--

Rupees 40103---9 on this work, the

Adimapully Ancient

Ancient lining:-

Ancient across the Pennar	Rs	34940-10-5
Under Sluice South side	"	1192-11-9
Head Sluice	"	335-11-6
Flood banks North Side	"	320-4-7
Stop banks	"	1728-"--
North wing wall	"	1585-10-6.

Rupees 13-14-- on the Somaiswaram

Somaiswaram Ancient — Ancient for Special Superintendence and Sundries.

Distribution Works. 3. The outlay on works of distribution was Rs 25718-6-6 viz:-

1st Section	Rs	9--2
2nd Do	"	52-1-7

Works	Amount of Estimate	Expenditure upto 31st Dec. 170.	Cost during the Quarter ended 31st March 171.	Total Expenditure	Add Amount transferred to this from other works	Deduct refunds to this from other works	Total Net Expenditure	Amount Avail-able	Increase Estimate
Main Supply.									
Sirsi and Head Works at Kurnool	303080	60327		60327			60327	242753	
do do Sonakazala	493122	470038	2034	472072	81		472153	20969	
do do Somasuram	171727	66120	14	66134			66134	105593	
do do Adavipalley	344440	382249	40103	422352	446	245	422553		78113
Aqueduct across the river Hindri	276250	276325		276325			276325		75
Canal for 1st mile from the Head Sluice of the Kurnool Canal	64000	49285		49285			49285	15715	
Main Canal 1st Section 1¼ miles	1073687	1094847	2212	1095059	7	7827	1073239		19552
do 2nd 18th to 32nd mile	1963370	1957432	8232	1965664		1755	1913909		539
do 3rd 33rd to 43rd	978190	906485	1264	907749	4	1755	905988	69802	
do 4th 44th to 60th	1055521	978381	223	978604	1223		979827	75694	
do 5th 61st to 72nd	880738	869030	1977	871007			871007	9731	
do 6th 73rd to 91st	943227	813749	21861	827610	2942		840552	102675	
do 7th 92nd to 114th	748483	646990	3822	650812	1785	31	652566	95917	
do 8th 115th to 143rd	736111	740843	35927	776770	57	5	776822	3289	
do 9th 144th to 178th	943857	694365	11381	705747	888	5	706630	237207	
do 10th 179th to 186th	256327	168285	8061	176346			176346	79981	
Total	11268910	10176812	139068	10309880	7433	3623	10311690	1055499	98279

Distribution

Branch Channels and Sluices of 1st Section									
Distributary works of 2nd Section									
do 3rd									
do 4th									
Constructing a bund across the Nawab in the 4th Section									
Distributary works of 5th Section									
do 6th									
do 7th									
do 8th									
do 9th	15000	873	3178	4051			4051	10957	
do 10th	10,000		264	264			264	9736	
do at Sonkasala									
Kurnool Town water supply									
Total	236855	72288	25719	98007		4	98003	139630	

Buildings.

Central Hospital with outhouses and Compound Wall at Kurnool	5050	4781		4781			4781	269	
Repairs to do do	68	60		60			60	8	
Overseers hut at Kurnool	1245							1245	
Office Store house and Workshop at Sonkasala	5947	5986		5986			5986		39
Powder Magazine Store and Station Road at Bovanasy	4359	4359		4359			4359	9	
Office Store room and Artificers Shed at Bovanasy	7298	7523		7523			7523	473	
Repairing the above buildings at do	648								
Improvement of the road &c.									
Trenching to the above buildings and repairing Culverts at do	570	318		318			318	260	
Converting the unfinished building intended for a Gunpowder Magazine Jail into a Hospital at do	427	31		31			31	396	
Office and Store building at Talapanoor in do	1970	1990		1990			1990		20
do do at Jupadu in the Nagalapur do	4123	4782		4782			4782		659
do do Purchidial in do	3977	3833		3833			3833	144	
do do Mantagoorta in the Komdaur do	5283	5278		5278			5278	5	
do & temporary Store Shed at Nagalapur in do	642	67		67			67	575	
Repairs to Tenement office at Jonnagiri	327	308		308			308	19	
Office Store and Workshop at Kurnool	30612	14492	33	14525			14525	16087	
Iron and Brass foundery at do	15328	15168		15168			15168	160	
Room for receiving & despatching Stores at do									
Quarters for Sub Asst Engineers & Asst Surveyors at Komdaur	1236	561		561			561	675	
Engineers Bungalow at Bhoor	4980	4923		4923			4923	57	
Total	94098	74460	33	74493			74493	24323	718
Line of Telegraph	49440	55609	3065	58674	100	207	58367		9127
Grand Total	116492 81	403791 69	161885	10541054	7533	5934	10542753	1214652	1008124

It will be remarked that the expenditure of the quarter is shown to have been Rs 161005 — and the next total outlay up to 31st March 1871 Rupees 1054753 — —

Quarter's Expenditure —

7. The subjoined statement shows the expenditure in excess of sanction at the end of the quarter to have been Rs 100124 — — —

Excess Expenditure —

Works.	Excess expenditure up to 31st December 70	Excess Expenditure during the first quarter 1871	Total	Add transferred to this from other works	Deduct Receipts	Excess of Expenditure on 31st March 71
Main Supply						
Sinding Aqueduct	75		75			75
Sluice and Head Works at Adimaipully	37809	40103	77912	446	245	78113
Main Canal 1st Section	21160	212	21372		1827	19552
" " 2nd "		2294	2294		1955	339
Total	59044	42609	101653	453	3827	98279
Buildings.						
Office Store house & Workshop at Sonkasalay	39		39			39
Do at Palapanam	20		20			20
Do at Jaffna	659		659			659
Total	718		718			718
Line of Telegraph	6169	3065	9234	104	207	9131
Grand Total	65931	45674	111605	557	4034	108128

Preparation of revised Estimates

8. The Excess Expenditure shown in the foregoing Statement with the exception of that on the 2nd Section has already been reported upon in the Progress Report for the last quarter and the Agent has been requested to submit a Supplemental Estimate for the Excess on the 2nd Section.

P° 74. 9th Septr 1871

Estimates submitted to Govern. Agent during the Quarter

9. The following Estimates were received from the Agent and submitted to Government during the quarter.

1) Bill of Cost for erecting Bankers and Sluice Lascars huts — Rs 58 — —

2) Plans and Estimates of Calmgutah P° 73 at 24th mile 2nd Section — 6130 — —

3) Do for waste weir and Surplus Channel in the 1st Section — 290 — —

4) Supplemental Estimate for additional repairs to the Aqueduct 32nd mile 2nd Section — 3480 — —

5) Plan and Estimate for a masonry protection of the toe of the return bund near the 2nd Section — 1470 — —

is in. Of these the first four received the sanction of Government during the quarter and the last one was since sanctioned, as also the four following Estimates which were previously submitted. Viz. Estimates sanctioned.

1/ Plan and Estimate for repairing breaches of August 1870.

2/ Do. Do. for repairing Slips in the 4th Section Main Canal

3/ Do. Do. for clearing Silt in the first five miles of the Canal during 1871-72. And

4/ Do. Do. for Distribution works 10th Section.

10. The cost of effective permanent Establishments amounts for this quarter to 18·46 per Cent on the expenditure for Construction that of the temporary establishments to 0·97 per Cent and that of the General Management to 12·84 per Cent. Cost of Establishments.

11. The total cost of the permanent Establishment was therefore 31·30 and of temporary Establishments 0·97 per Cent on the expenditure. Total Cost of Establishments.

I have the honor to be
Sir.
Your most obedt. Servt

H. Dales Capt. R.E.
Acting Chief Engineer for Irrigation
and Joint Secy. to Govt.

Compd
W.P.D.

P. W. Ltr to Engl. dated 6th
from ENo 25 of 1871

P. W. Dept
No 2744.
Proceedings of the Madras Government
Under date the 31st October 1871
Read the following
from the Addl Chief Engineer
for Irrigation. Dated 28th Septr 1871
Ordered that
the report be forwarded
to the Home Govt.

To the Chief Engineer
for Irrigation
Agent & Manager
Madras Irrigation & Canal Co.

Dated 1/11/71.

No 496

6 Copies Ackd 7th Novr 71.

To
The Right Honorable
The Secretary of State
for India.
My Lord
We have the
honour to forward the
accompanying

P. W. Sirs Engd elected 6 hours
No 25 of 1871

Fort St George

Public Works Dept.

Letter to the Right Honble
the Secretary of State for
India

c- No- 4624-

Govt. of [1871] Madras.

PUBLIC WORKS.

To The Chief Engr for Irrigation

Dated

Recd. Encl.

G. O. 31st Aug 1871, No. 2744.

Nos. 476 & 477

Works = Passing on Report on the progress of the works of the Madras Irrigation & Canal Company during the quarter ended 31st March 1871.

Dated 6th hours No 25 of 1871

Original & Copy sent per Overland mail on the 8th hour 1871

Copy sent to Govt of Madras on the 8th hour 1871

Forwarding the Report on the progress of the works of the Madras Irrigation & Canals Company during the quarter ended 31st March 1871-

Describe / Forwarding the report on the progress of the works of the Madras Irrigation & Canal Company during the quarter ended 31st March 1871

6 Acts & Accts 71 No 18