

(1) Number of pages 10

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No. 287

Press

Mis.

Dated 30 — 1 — 1877.

Not to be folded or roughly handled

12

*Proceedings of the Madras Government, Public Works Department,
30th January 1877. No. 287.*

Read the following:—

No. 64—W.

No. 591.

Note by the Chief Engineer for Irrigation.

The following estimates from the No. 1 or Northern Range are forwarded by the
Officiating District Engineer, Tinnevely,
No. 154, dated 3rd January 1877. with his letter marginally noted:—

Taluq.	Village.	Work.	Amount.
			RS.
Strivilliputhur ..	Kadambenkulam ..	V. Tank ..	580
Do. ..	Kunnur ..	Nungoorkulam Tank ..	520
Do. ..	Regunathapuram ..	Thoolukenkulam Tank and Supply Channel..	780
Sattur ..	Puliencolum ..	V. Tank ..	260
		Total ..	2,140

2. The financial and hydraulic details of the irrigation works concerned are exhibited in the following statement:—

I.—Financial Details.

Name of Work.	Ayacut Area.	Assessment.	Average Revenue for 6 years.	Highest Revenue for 5 years.	OUTLAY.			
					During the previous 4 years.	PROPOSED ORDINARY AGRICULTURAL IRRIGATION		
						Original Works.	Repairs.	Average annual proportion of charges to Revenue.
	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.	PER CENT.
Kadambenkulam Tank ..	77	423	365	382	Nil	126	454	81.7
Nangoorkulam Tank ..	29	215	230	253	..	315	250	45.2
Thoolukenkulam Tank and Supply Channel ..	47	231	253	266	..	190	590	61.6
Puliencolum Tank ..	13	58	52	55	..	162	98	100.0
Total..	166	927	900	956	..	793	1,347	47.5

II.—Hydraulic Details.

Name of Work.	Catchment Basin Area.	MAXIMUM SUPPLY.		LENGTH OF ESCAPE.		AVERAGE HEIGHT OF BUND.		Surplus discharged at M.T.L. per Sec.	Tanks above.
		Catchment per Second.	Channels per Second.	Total.	Effective.	Above F.T.L.	Above M.T.L.		
Kadambenkulam Tank ..	S. M. Nil	C. FT. 601.9	C. FT. ..	FT. Nil W. 54	FT. Nil 54	FT. Not stated. 4.5	FT. Not stated. 2.5	C. FT. 0.0 513.1	NO. 1
Nangoorkulam Tank ..	..	670	..	Nil W. 72	Nil 72	Not 3.75	Not 1.75	0.0 684.2	..
Thoolukenkulam Tank and Supply Channel ..	..	..	255	Nil W. 40	Nil 40	Not 3.75	Not 2.25	0.0 246.8	Nil.
Puliencolum Tank ..	0.5	177	..	Nil W. 30	Nil 30	1.93 3.75	0.43 2.25	0.0 185.1	..

NOTE.—The proposed dimensions of escapes and heights of bund are printed in large type. The existing dimensions in small type. The following abbreviations are used:—C.—Calingulah with dam stones. W.—Weir with flush crest, E.—Escape at ground level. B.—Bund of tank. V.—Village.

3. The following is a summary of the work proposed to be carried out in each case:—

Kadambenkulam Tank.—This tank is situated just below the Thiruvalukulam tank, which receives the surplus of the Vadainalaikurichy tank lately put in order at a cost

Proceedings of the Madras Government, Public Works Department,
30th January 1877. No. 287.

of Rupees 1,292. The bund of the tank under notice is in very bad order, the irrigation sluice is damaged and the tank has no surplus work of any kind.

The estimate provides for raising and repairing the bund, repairing the irrigation sluice and constructing a masonry weir at the south end of the bund.

Nangoorkulam Tank.—This tank is the last of the Kunnur series, and is supplied by the Kunnur channel as well as by rain; it has no masonry structures of any description, but has a pot-sluice in a dilapidated condition; the bund is in very bad order, not having been repaired for a number of years.

The estimate provides for raising and repairing the bund, constructing a masonry weir and an irrigation sluice.

Thoolukenkulam Tank and Supply Channel.—This tank is supplied by the Valenkulam channel, and has not been repaired for a number of years, the bund is very low and weak, and the supply channel which takes off from an anicut about a quarter of a mile from the tank is silted up to a great extent, the anicut also has a breach in it 18 feet in length which was caused by the foundations being undermined by the floods of 1869. The tank is without an outlet, and has but one irrigation sluice which is in good condition, but needs slight improvements.

The estimate provides for raising and repairing the bund, repairing the channel and anicut, improving the sluice and constructing a masonry weir.

Pulienkulam Tank.—This tank commands the South India Railway line. The bank at the south end needs lengthening and raising. The lands under the tank are now irrigated by a pot sluice, in lieu of which a masonry sluice is proposed to be constructed, and as the tank has no outlet for the surplus it is proposed to construct a masonry weir.

The estimate provides for raising and repairing the bund, constructing an irrigation sluice and weir.

4. The reports accompanying these estimates are defective, inasmuch as these tanks and the remainder in the groups to which they respectively belong are not treated in each case as if they were a system to be considered and dealt with practically as one work or project.

The estimates are required in connection with relief operations and they are therefore recommended for sanction.

The following statement shows the proposed distribution of the outlay recommended for sanction, to the debit of the several heads of account involved:—

Name of Tank.	Items of Estimate.	FUND, ORDINARY AGRICULTURAL IRRIGATION.		Total for each Tank, &c.
		Original Works.	Repairs.	
Kadambenkulam Tank..	Raising and repairing the bund, also repairing the irrigation sluice	Rs. 126	Rs. 454	Rs. 580
Nangoorkulam Tank ..	Constructing a masonry weir	126	205	520
Thoolukenkulam Tank and Supply Channel	Raising and repairing the bund	136	179	780
	Constructing a masonry weir	179	345	
	Raising and repairing the bund and repairing an irrigation sluice	..	245	
	Repairing the channel and anicut	190	98	260
Pulienkulam Tank ..	Constructing a masonry weir	70	92	
	Constructing an irrigation sluice	92	..	

FORT ST. GEORGE,
23rd January 1877.

(Signed) A. DEC. SCOTT, Major, R.E.,
Dy. Chief Engr. for Irrigation,
for Chief Engr. for Irrigation.

To the Secretary to Government, Public Works Department.

Proceedings of the Madras Government, Public Works Department,
30th January 1877. No. 287.

No. 592. ORDER THEREON, 30th January 1877, No. 287.

IRRIGATION, No. 63.
Account.

No. 64—W, dated 23rd January 1877.

THE following estimates for irrigation works in the No. 1 or Northern Range, Tinnevely District, forwarded by the Chief Engineer for Irrigation with his memorandum marginally noted, are sanctioned:—

Name of Work.	Item of Estimate.	Fund, Ordinary Agricultural, Irrigation.	Amount.	Irrigation Registry No.
Kadambenkulam Tank ..	Repairing bund and sluice ..	Repairs ..	Rs. 454	1 } 286—I.
	Weir ..	Original Works ..	126	2 }
Nangoorkulam Tank ..	Repairing bund ..	Repairs ..	205	1 } 287—I.
	Weir ..	Original Works ..	136	2 }
	Sluice ..	Do. ..	179	3 }
Thoolukenkulam Tank and Supply Channel ..	Repairing bund and sluice ..	Repairs ..	345	1 } 288—I.
	Do. channel and anicut ..	Do. ..	245	2 }
	Weir ..	Original Works ..	190	3 }
Pulienkulam Tank ..	Repairing bund ..	Repairs ..	98	1 } 289—I.
	Sluice ..	Original Works ..	70	2 }
	Weir ..	Do. ..	92	3 }

2. These sanctions are registered as shown above.

(True Extract.)

Lieut.-Colonel, R.E.,
Secretary to Government.

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

Exd. S. T. Austin.
Spare Copies

5-
OFFICE OF CHIEF ENGINEER FOR IRRIGATION,
Fort St. George 23 January 1877.

No. 64.16.

Note by the Chief Engineer for Irrigation.

No. 154

Dated 3 Jan 1877.

The following Estimates from the *N. for Natta* Range are forwardedby the *Officiating District Engineer* *Trimevelly* with his letterEnclosures. 17. marginally noted: *...*

Taluq.	Village.	Work.	Amount.
<i>Thiruvilliputhur</i>	<i>Rodam</i>	<i>V. Tank</i>	<i>580</i>
<i>do</i>	<i>Kunur</i>	<i>Nangoorkur</i>	<i>520</i>
<i>do</i>	<i>Regunatha</i>	<i>Thirukankulam</i>	<i>780</i>
<i>do</i>	<i>Pulincolum</i>	<i>V. Tank</i>	<i>260</i>
<i>Total Pups</i>			<i>2140</i>

2. The Financial and Hydraulic details of the Irrigation works concerned
are exhibited in the following statement:

Financial Details.

Name of Work.	Area of Acres.	Assessment. Rs.	Average Revenue for 5 years. Rs.	Highest Revenue for 5 years. Rs.	During the previous 4 years. Rs.	Proposed Annual Rs.	Average annual proportion of Charges to Revenue. Rs.
<i>Rodambenkulam Tank</i>	<i>77</i>	<i>425</i>	<i>365</i>	<i>382</i>	<i>Nil</i>	<i>126</i>	<i>34.7</i>
<i>Nangoorkulam Tank</i>	<i>29</i>	<i>215</i>	<i>230</i>	<i>253</i>	<i>315</i>	<i>205</i>	<i>45.2</i>
<i>Thoolukinkulam Tank and supply Channel</i>	<i>47</i>	<i>231</i>	<i>253</i>	<i>266</i>	<i>190</i>	<i>590</i>	<i>81.6</i>
<i>Pulincolum Tank</i>	<i>13</i>	<i>58</i>	<i>52</i>	<i>55</i>	<i>162</i>	<i>98</i>	<i>100.0</i>
<i>Total</i>	<i>166</i>	<i>929</i>	<i>900</i>	<i>956</i>	<i>793</i>	<i>1347</i>	<i>47.5</i>

II.—Hydraulic Details.

Name of Work.	Catchment Area.	Maximum Supply.		Length of Escape.		Average Height of Bund.		Surplus discharged at M. T. L. per Sec.	Tanks above.
		Catchment per Second.	Channels per Second.	Total.	Effective.	Above F. T. L.	Above M. T. L.		
Sq. M.	C. ft.	C. ft.	Fe.	Fe.	Fe.	Fe.	C. ft.	No.	
Kadambenkulam Tank	Nil	501.9		Nil	Nil	Not stated	0.0		
				W 54	54	4.5	2.5	13.1	1
Nangoorkulam Tank	670			Nil	Nil	Not stated	0.0		
Thoolukenkulam Tank and supply channel		255		Nil	Nil	Not stated	0.0		Nil
Pulincokulam Tank	Nil	177		Nil	Nil	1.93	0.43	0.0	

Note.—The proposed dimensions of escapes and heights of bund are entered in red. The existing dimensions are in black. The following abbreviations are used:—K.—Kalingulah with dam stones. W.—Weir with flash crest. E.—Escape at ground level. B.—Bund of tank. V.—Village.

3. The following is a summary of the work proposed to be carried out in each case—:

Kadambenkulam Tank.

This tank is situated just below the Thiruvallukulam Tank which receives the surplus of the Vadimalaikurichy tank lately put in order at a cost of Rs. 1292. The bund of the tank under notice is in very bad order, the irrigation sluice is damaged and the tank has no surplus work of any kind.

Note in P. 108.—Red entries in this note are to be printed in Clarendon type, and note in para 2 of P. 108 to suit.

The estimate provides for raising and repairing the bund, repairing the irrigation sluice and constructing a masonry weir at the south end of the bund.

Nangoorkulam Tank.

This tank is the last of the Kinniar series and is supplied by the Kinniar channel as well as by rain; it has no masonry structures of any description but has a pot sluice in a dilapidated condition, the bund is in very bad order, not having been repaired for a number of years.

The estimate provides for raising and repairing the bund, constructing a masonry weir and an irrigation sluice.

Thoolukenkulam Tank and supply channel.

This tank is supplied by the Valenkulam channel, and has not been repaired for a number of years; the bund is very low and weak, and the supply, which takes off from an Aricut about a quarter of a mile from the tank is silted up to a great extent, the Aricut also has a breach in it 18 feet in length which was caused

caused by the foundations being undermined by the floods of 1869. The tank is without an outlet, and has but one irrigation sluice which is in good condition, but needs slight improvements.

The estimate provides for raising and repairing the bund, repairing the channel and Anicut, improving the sluice and constructing a masonry weir.

Pulienkulam Tank.

This tank commands the South India Railway line. The bank at the South end needs lengthening and raising. The lands under the tank are now irrigated by a pot sluice in lieu of which a masonry sluice is proposed to be constructed, and as the tank has no outlet for the surplus it is proposed to construct a masonry weir.

The estimate provides for raising and repairing the bund, constructing an irrigation sluice and weir.

The reports accompanying these estimates are defective inasmuch as these tanks and the remainder in the groups to which they respectively belong are not treated in each case as if they were a system to be considered and dealt with practically as one work or project.

The estimates are required in connection with relief operations and they are therefore recommended for sanction.

The following Statement shows the proposed distribution of the outlay recommended for sanction, to the debit of the several heads of account involved:—

92

Name of Tank.	Items of Estimate.	Fund. Ordinary Agricultural Irrigation.		Total for each Tank, &c.
		Original Works.	Repairs.	
Kadambenkulam Tank.	Raising and repairing the bund, also repairing the Irrigation sluice —		454	580
	Constructing a masonry weir —	126		
Nangoorkulam Tank.	Raising and repairing the bund —		205	520
	Constructing a masonry weir —	136		
	Constructing an Irrigation sluice —	179		
Thoolukenkulam Tank and supply channel.	Raising and repairing the bund and repairing an Irrigation sluice —		345	780
	Repairing the Channel and Anicut —		245	
	Constructing a masonry weir —	190		
Pulienkulam Tank.	Raising and repairing the bund —		98	260
	Constructing an Irrigation sluice —	70		
	Constructing a masonry weir —	92		

And L. S.

Major R. E.
Dy. Chief Supt. for Irrigation
for Chief Supt. for Irrigation

P.W.D.

27 JAN 1877

No. 7983

From
The Chief Eng^r for Irrig.

Dated 23rd }
Recd. 26 } Jan. 1877

Encls 17.

No. 64-W

Tank Repairs - Tirunelveli
District. - Note forwarding
for sanction estimates for Ru-
pees 2140 for certain -

E. I. Form No. 3.

No. 287 of 30 Jan 77 112 Feb 77

The following Estimates for Irrigation
works in the *W. or Northern* Range,
Tirunelveli District, forwarded by the
Chief Engineer for Irrigation with his Memo.
dated 23rd January 1877. marginally noted are sanctioned:-

No. 64 W. sent
dated 23rd January 1877.

Name of Work.	Item of Estimate.	Fund. Ord. - nary. Agricul. - tural. Irrigation.	Amount	Irrigation Registry No.
Kadamben. Kulam Tank	Repairing bund and sluice -	Repairs	454	1 } 286 F
	Weir -	Original work	126	
Nangoorhu. Kulam tank.	Repairing bund	Repairs	205	1 } 287 F
	Weir -	Original work	136	
	Sluice -	do -	179	
Thoolukem. Kulam Tank and supply Channel.	Repairing bund and sluice -	Repairs	345	1 } 288 F
	Repairing Channel and Aicut -	do -	245	
	Weir -	Original work	190	
Puliencolum. Tank -	Repairing bund	Repairs	98	1 } 289 F
	Sluice -	Original work	70	
	Weir -	do -	92	

Ch. Engr. Tirunelveli ✓ 2 These sanctions are regis-
Ch. Engr. for S. with 15th Feb 77 as shown above.
Engr. B. A.
Secy. Dept. ✓
Dated 3-2-77

132
790
Oct. of 1877 Madras.
PUBLIC WORKS.

To *The Commr. Linnacally*
Dated *1/27/78*
Issued
Recd. Encl.

G. O., 30th Sept 1877, No. 28

Nos. 591-592

Lanks. Linnacally
Dr - The estimates
amounting to Rs. 2140
for repairs to certain
—, sanctioned

Sanctioned by

11.77.120

132
790
Oct. of 1877 Madras.
PUBLIC WORKS.

To *The Commr. Linnacally*
Dated *1/27/78*
Issued
Recd. Encl.

G. O., 30th Sept 1877, No. 287

Nos. 591-592

Lanks. Linnacally
Dr - The estimates
amounting to Rs. 2140
for repairs to certain
—, sanctioned

Sanctioned by

11.77.120

132
790
Govt. of 1877 Madras.
PUBLIC WORKS.

To *The Commr. Linnacally*
Dated *1/27/77*
Issued
Recd. Encl.

G. O., 30th Sept 1877, No. 287

Nos. 591-592

Thanks, Linnacally
for the estimates
amounting to Rs. 2140
for repairs to certain
—, sanctioned

For and by

11.77.120