

(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. 2694

Press
Mis.

177-79

Dated 10 - 11 - 1870.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
10th November 1870.*

Read the following papers:—

No. 177. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Cuddalore, 15th October 1870, No. 154.

- I HAVE the honour to call your attention to the remarks of the Acting Chief Engineer for Irrigation in his Memorandum, No. 188, dated 5th September 1870.

2 Plans.
2 Estimates of Rupees 720 and 580.
2 Specifications.

2. On the 1st ultimo I had the honour of submitting, for sanction, two estimates, with plans and specifications complete, for the construction of sluices of the authorized pattern to the Comutty Nunjayan's tank and the Thevaganapully Virarajayan's tank, both in the Oosoor Range of the Salem District; but, as you will observe from the Acting Chief Engineer's memorandum above quoted, I am now directed to alter these to some other pattern.

3. It may be as well to mention here that, on the occasion of his returning to this office for revision the Bara Talab project, in which it was proposed to adopt a form of sluice somewhat analogous to that recommended by Major Mullins, the Chief Engineer for Irrigation, in his Memorandum No. 130, dated 5th January 1869, distinctly laid down that the native pattern of sluice is to be preferred, and he directed that the plan should be altered accordingly.

4. Now I submit that it is very harassing to this department if, after conforming with the orders of Government, and acting with the expressed approval of the Chief Engineer for Irrigation, the plans so submitted from this office are liable to be returned for revision in order to suit the particular views or caprices of whoever may be acting for that officer.

5. All I ask is that we may have some standard plan to guide us.

6. With the War Office the practice is, before they order a new standard plan for adoption, they first prepare in the office a plan carefully figured and a detailed estimate, and a copy of these is forwarded to the Commanding Royal Engineer of each station for information and guidance.

7. If such a practice is found absolutely necessary at Home, surely a like assistance should be given to Range Officers out here; for, with the very defective staff of Draughtsmen in the Ranges, the preparation of plans is attended at all times with an infinity of trouble to the Range Officers, and it is obvious that every aid should be given them in the way of simplifying matters, and reducing to a system trifling works of the description under notice.

8. It is evident that the opposite of this practice, the leaving of a Range Officer uncertain, or rather certain only of one thing, and that is that whatever plan he may submit is liable to be returned for revision, must be as discouraging to the officer himself as it is detrimental to the Government service, in the loss of time and labour thus occasioned.

9. Had a Range Officer submitted to me a plan, such as this revised one under discussion, I should have at once returned it to him, not so much because I considered that—

a. it reduced the thickness of the bund at its weakest point, or

*Proceedings of the Madras Government, Public Works Department,
10th November 1870.*

- b. that it caused an additional outlay of about 50 per cent. over what is usual and necessary; and,
- c. that it entailed the constant supervision of paid watchers to prevent cowboys, goatherds, and other vacuous loungers on that 'Tom Tiddler's land,' a tank bund, from passing their time in the congenial occupation of opening and shutting the sluice, and thus wasting the water; but
- d. simply and solely because it was not according to the standard plan, authorized after much consideration by Government.

10. I have the honour, therefore, to respectfully request that I may be favoured with the definite instructions of Government as to the plan of sluice that is to be adopted in the tanks of this division that may require to be provided with new sluices.

No. 203.

No. 178. *Note by the Acting Chief Engineer for Irrigation.*

THE Acting Superintending Engineer of the 5th Division having received instructions to modify the designs of two tank sluices, for which estimates and plans were submitted by him, has appealed to Government objecting to the required alterations, because—

1st.—The designs as submitted were of the authorized pattern.
2nd.—The instructions given by me are supposed to be contrary to those issued in the case of the Bada Talab tank sluices by Colonel Anderson, when Chief Engineer for Irrigation.

3rd.—The revised design is, in his opinion, objectionable in several respects.

2. So far as I am aware there are no authorized patterns of tank sluices. The designs submitted by Captain Roberts appear to be similar to those in "Notes on building and road-making, etc.," a book containing much useful information, but which is not an authoritative guide to members of the Public Works Department.

3. The instructions issued by me are in no way opposed to those of Colonel Anderson. The native form of sluice, in the essential particular to which Colonel Anderson referred, is preserved, and the arrangement of the head of the sluice is as nearly similar to that adopted by my predecessor as it can be.

4. Of the third class of objections, the first assumes that the bund is weaker at the sluice with the revised than with the original design. I am obliged to differ absolutely from Captain Roberts' opinion on this point. The second intimates that the revised design will unnecessarily increase the cost of the sluices 50 per cent. Two essential conditions were ignored in the original design: first, the sluice plug would have been 15 or 16 feet under water when the tank was full, with no means of getting at it but by a diver; diving is always attended with some risk, and all proper regulation under such circumstances must be impossible; secondly, the dimensions of the sluice tunnel were $1 \times 1\frac{1}{2}$ feet, and these do not admit of inspection or repair without opening the bund; the third refers to the necessity for

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10th November 1870.*

paid watchers if the regulation of the sluice from a platform be allowed: practically no such necessity has been found to exist, and it is manifest that any interference with the regulating chains or rods can be prevented by the very simple precaution of locking them.

5. I think the reasons which rendered a revision of design advisable were quite sufficiently clearly stated in this Office Memorandum, No. 188, of the 5th ultimo, and Captain Roberts' reference appears to me to have been quite uncalled for, while his questioning the propriety of instructions on points which were entirely within the discretion of the Acting Chief Engineer for the time being was, I submit, irregular.

FORT ST. GEORGE,
17th October 1870.

(Signed) J. MULLINS, Major, R.E.,
Acting Chief Engineer for Irrigation.

No. 179. ORDER THEREON, 10th November 1870, No. 2,694.

IRRIGATION, No. 9.

THE Note of the Acting Chief Engineer for Irrigation will be communicated to the Acting Superintending

Engineer of the 5th Division, and the latter officer will be informed that on points such as those referred to in the correspondence between himself and the Chief Engineer, the instructions of the latter officer should be duly attended to, and any representations which Captain Roberts may wish to make with regard to those instructions, should be addressed in the first instance to the Chief Engineer.

(True Extract.)

Major, R.E.,

Joint-Secretary to Government.

To the Acting Superintending Engineer, 5th Division.
" Chief Engineer for Irrigation.

Exd. S. T. Augustin.

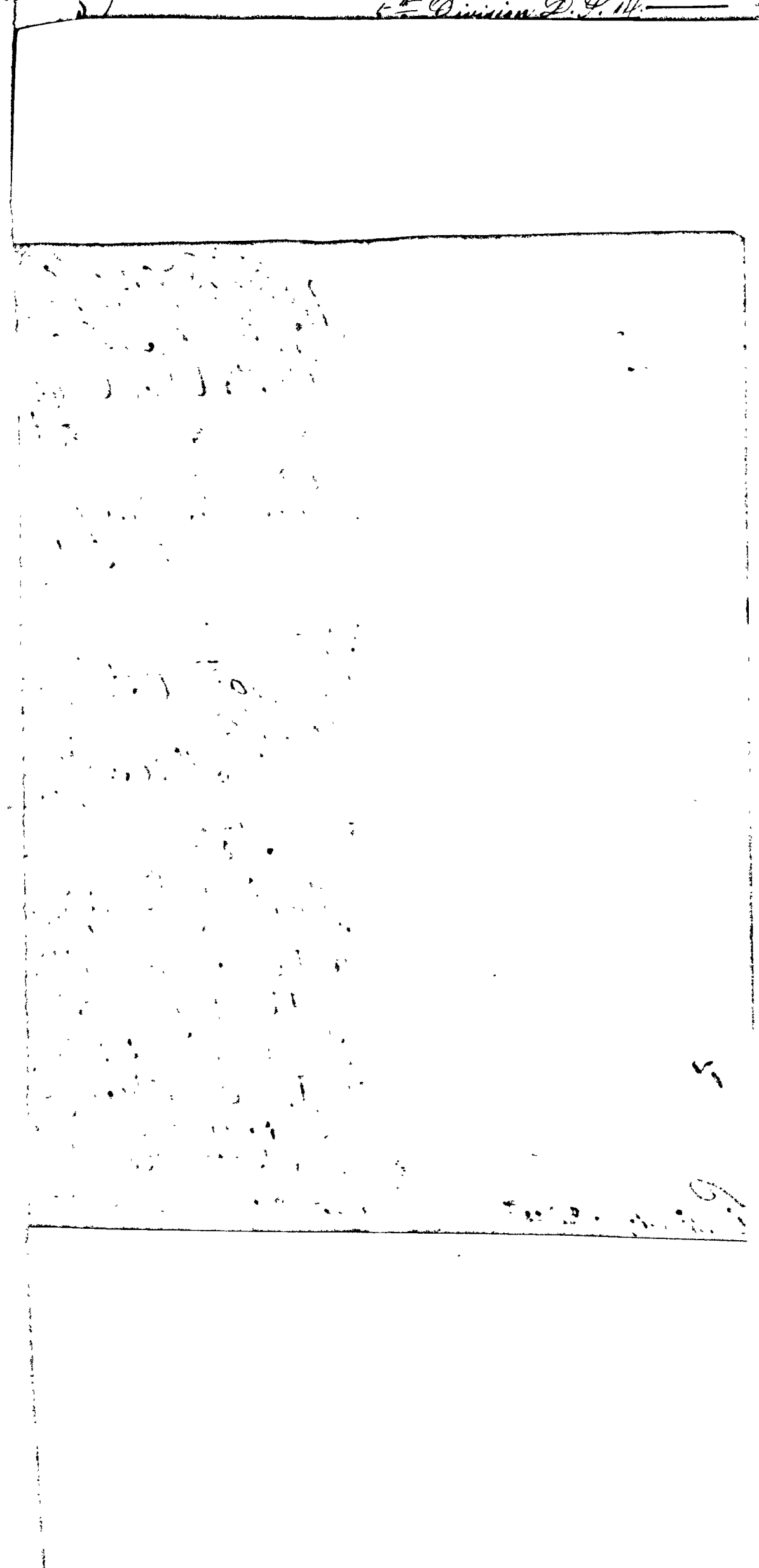
Minister No. 293
Note by the Acting Chief Engineer for Irrigation
The Acting Superintending Engineer of the 5th
Division having received instructions to modify
the designs of two tank sluices, for which es-
timates and plans were submitted by him,
has appealed to Government objecting to the
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1st The designs as submitted were of the au-
thorized pattern
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Colonel Anderson, when Chief Engineer for
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a point which were entirely within the dis-
cretion of the Acting Chief Engineer for
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Fort St George John Linnell Major R.
17 October 1870 The Chief Engineer for Irrigation

The Secretary to Govt P. M. D.
I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the above mentioned subject and in reply to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,
Your obedient servant,
J. H. [Signature]



1878 Sept
 To the Chief Engr.
 for irrigation
 The Secretary
 to Govt. P.M.

Dated 17th
 Despatch 19th October 1878
 Recd 19th

N^o 203. En: 7
 2 Plans

Note on the ap-
 peal of the Chief Engr.
 5th Div. to Govt. objecting
 to the required alterations
 by the Khfrugs for Mr.
 of the designs of 2 sluices
 to the Banetty Kunjayan
 & Theraganapalli, Varra-
 jayan's tanks. Salem Dist.
 N^o 2694 - 5th Div. 1878.

1878

6 24th Oct 1878

C.M.P.

5th Division D. P. M.

Specifications to accompany an estimate for
 constructing a sluice in the bund of Theraganapalli
 Varrajan's tanks.

Amount of Estimate Rs. 580-0-0

- 1 The measurements and quantities are given
 in the plan and estimate.
- 2 The foundation and superstructure will be of
 brick in mortar. The head, cistern, and inside of
 tunnel will be plastered with two coats of chunam.
- 3 The tunnel will be covered with granite cover-
 ing stones each measuring $2\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{2}$.
- 4 Depth of foundations for head and cistern
 3 feet and for the tunnel $1\frac{1}{2}$ feet. The size of
 the tunnel will be $1 \times 1\frac{1}{2}$ feet, and cistern 4 feet
 square. There will be a blocking course of $\frac{1}{2}$ feet
 over the covering stones.
- 5 All the materials and workmanship
 will be of the best procurable.

J. B. P. Engineer

Ossoor Range Office Assistant Engineer.
 Ossoor 29th June 1879.

Richd. Roberts Captain R.E.
 Ag. Superintending Engineer

Agricultural.

New Works.

Salem District.

Copsoor Range.

Copsoor Talook.

Abstract Estimate of 1870-71.

Work. Constructing a new sluice for the ^{Therappupalli Virarajayan's} ~~Theraragum~~ Tank, situated in the 12th Mile of the Tellie Road, the Tellie Road passes over the bund.

Agency. Acres. 142. Rains. 1038....

Highest of 5 years. 996....

Average of 5 years. 954....

Last repairs. Not known.

Remarks. The present sluice is in a ruined state and does not admit of the supply of water being regulated. The ryots have tried to remedy this by putting a ring bund round the cistern, but have not been very successful. This Estimate provides for a new sluice.

Quantity	Description of work	Rate	Per	Amount	Total
78 ¹¹ / ₁₆	Cubic yards of brickwork in Mortar	4	byd	314	7 1
6 ⁵⁰⁹ / ₄₀₀	Squares of plastering with two coats of Mortar	3	Sqre	20	5 .
63	Covering stones 4 x 1 ¹ / ₂ x ¹ / ₂	12	Each	47	4 .
2	Head Stones with orifices	1	do.	2	..
500	Cubic yards of earthwork	14	byd	66	10 8
800	ditto of ditto including watering and ramming	18	do.	83	5 .
48	ditto of old rough stone work for revetment	6	do.	18	..
				552	. 1
	Carried over			552	. 1

5th Division D. I. M.
Salem District
C. S. Rangar
4105
M. 418/140
Amount of Estimate Rs. 580
Specification to accompany
an estimate for construction
of a sluice in the bund
of Therappupalli
Virarajayan's Tank.

Brought over

552 . 1

Sundries

27 75 11

Total Amount of Estimate Rupees 580

Rupees Five hundred and eighty only

Coppos Range Office

Natrumpilly 19th October 1868.

(Signed) L. W. Daynter

Assistant Engineer

Chas. Postm -
Collector of Salem.

Richd. Roberts Captain R.E.
Actg. Superintg Engineer S.D.

5th Division D.P. W.

Agricultural.
Salem District

Ojsoor Range.

New Works.
Ojsoor Talook.

Abstract Estimate of 1870-71.

Work. Constructing a new sluice and enlarging the balingulah of community Nannajyan's Tank, situated on the east side of the Ojsoor and Tallie Road and 12 Miles from Ojsoor.

Ayacut. _____ Acres 152 _____ Ropers. 1109----

Highest of 5 years. _____ 1018----

Average of 5 years. _____ 921----

Least Repairs. _____ Not known.

Remarks. The sluice is entirely broken and is of no use, a new one is therefore necessary. The present balingulah is only 60 feet long, as this is not enough, the ryots have been obliged to cut an opening at the other end of the bund in order to provide for the surplus water. This Estimate provides to make the balingulah 100 ft long and to construct a new sluice.

5th Division D.P. W.

Salem District

Ojsoor Range.

One to Supd Eng

11 7 70

Rs 4/5/8/70
4/68

P.W. #13, 70

From 5. North 50 L 118

Abstract Estimate for
Constructing a new sluice for
the ^{Shivaganapalli} Veeraragun Tank.
Veeraragun's tank.

Amount of Estimate Rs 580----

Quantity	Description of work	Rate	Per	Amount	Total
— Sluice. —					
75 ¹⁴ / ₁₈	Cubic yards of brick work in Mortar	4	byd	303	12 5
6 ⁴⁹ / ₈₀	Squares of plastering with two coats of Mortar	3	Sqre	19	13 4
60	Covering stones 4x14x1/2	12	Each	45	.
2	Head stones with orifices	1	do	2	.
720	Cubic yards of Earth to be excavated	1	4 byd	60	.
720	ditto of ditto for closing the breach to be watered and rammed	1	5 do	75	.

Carried over

Brought over. —————
 4⁰ Cubic yards of ^{old} rough stone work — 6 byd 15
 520 99

— Calingulah. —————

204⁷/₉ Cubic yards of new rough stone work — 12 do 153 5 4

177⁷/₉ ditto of earth to be excavated — 1 4 do 14 13

168 24

Sundries —————

31 3 11

Total Amount of Estimate Rupees 720 . . .
 Rupees Seven hundred and twenty only.

Coppos Range Office
 Nakhumilly, 19th October
 1868

/Signed/ L. W. Paynter
 Assistant Engineer

Chas. Poston
 Collector of Salem.

Wm. Roberts Captain & C.
 Actg. Superintg Engineer 5th Div.

1/42/70 1/20/70
5th Division D.P.W.

Salem District.

Copoor Range.

CC 1/5/3/70.

4168/

10/7/13/70
Pro. 5-10/10 L. 2. 178.-

Abstract Estimate for
Constructing a new sluice and
enlarging the balingulah of
Comutty Nunjayan's Tank.

Amount of Estimate Rs 720----

C.P.

5th Division D.P.W.

Specification to accompany an Estimate
for constructing a sluice in the bund of Comutty
Nunjayan's Tank.

1. Amount of Estimate Rupees 720-----

2. For detailed measurements and rates see

Plan and Estimate.

3. The whole of the foundation and superstructure
will be of brick in mortar. The head cistern & inside
of tunnel will be plastered.

4. The tunnel will be covered with covering
stones of granite each measuring $2\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{2}$ feet

5. Depth of foundation for head and cistern
3 feet and for the tunnel $1\frac{1}{2}$ feet. The size of the tunnel
will be $1 \times 1\frac{1}{2}$ feet and the cistern 4 feet square. A
blocking course of $1\frac{1}{2}$ feet thick is to be built over the
covering stones.

6. All the materials and workmanship are to
be of the best procurable.

Copoor Range Office
Copoor, 29th June 1869

/Signed/ L. W. Paynter
Assistant Engineer

Richd. Roberts Captain R.E.
Actg. Superintg. Engineer 5th Div.

N^o 154.

Superintg. Engrs. Office, 5th Divⁿ,
Cuddalore, 15th Oct. 1870.

From
Captain R. A. Roberts R.E.,
Actg. Superintg. Engineer,
5th Division.

To,
The Secretary to Government,
P. W. Department,
Madras.

Sir,
I have the honor to call your
attention to the remarks of the Acting
Chief Engineer for Irrigation in
his Memo. N^o 180, dated 5th September
1870.

2. On the 1st ultimo I had the
honor of submitting for sanction 2
Estimates with plans & Specifications
complete for the construction of
sluices of the authorized pattern to
the Comutty. Annajayen's tank and
the Thevaganapully Viarajayen's
tank, both in the Coosom Range of
the Salem District, but as you will
observe

Enclosures.
2. Plans.
2. Estimates of
Rs 720 & 500.
2. Specifications.

5th Division (D. J. M.)

Salem District.

Collected Revenue.

25/10/70.

4/68.

Mr. H. J. M.

Specification to accompany
Estimate for constructing a
sluice in the bund of
Comutty Annajayen's
tank.

Amount of Estimate Rs 720.

observe from the Acting Chief Engineer's Memo above quoted, I am now directed to alter these to some other pattern.

3. It may be as well to mention here that, on the occasion of his returning to this office for revision the Para Salab project, in which it was proposed to adopt a form of sluice somewhat analogous to that recommended by Major Mullins, the Chief Engineer for Irrigation, in his Memo No. 130, dated 5th January 1869, distinctly laid down that the native pattern of sluice is to be preferred, and he directed that the plan should be altered accordingly.

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of this practice - the leaving of a Range officer uncertain, or rather certain only of one thing, and that is that whatever plan he may submit is liable to be returned for revision, must be as discouraging to the officer himself as it is detrimental to the Government service, in the loss of time and labor thus occasioned.

9. Had a Range officer submitted to me a Plan, such as this revised one under discussion, I should have at once returned it to him, not so much because I considered that

- a. It reduced the thickness of the bund at its weakest point, or
- b. that it caused an additional outlay of about 50 per cent over what is usual and necessary, and
- c. that it entailed the constant supervision of paid watchers to prevent cowboys, goat-herds, and other vacuous loungers on that 'Tom Tiddler's land', a tank bund.

bund, from passing their time in the congenial occupation of opening and shutting the sluice, and thus wasting the water, but

d. simply and solely because it was not according to the standard Plan, authorized after much consideration by Government.

10. I have the honor, therefore, to respectfully request that I may be favored with the definite instructions of Government as to the plan of sluice that is to be adopted in the tanks of this Division that may require to be provided with new sluices.

I have the honor to be
Sir,

Your most Obedt Servt.

Richd. Roberts Capt. R.E.
Actg. Superintg. Engrs 5th Div.

No 2094
Proceedings of the Madras Government
1845-46

Sept. 10. 1870. Nürnberg.

Read the following

From The Ag Chief Engineer } H. E. N. 203 d/17th October 1870/
for Irrigation }
From The Superintending Engineer } H. E. N. 154 d/15th October 1870/
5th 9th }

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of the latter officer should
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Captain

Captain

The Public Offices

10/10/10

10/10/73

[illegible]

of Secretary to Govt.

Dr. W. D. D.

Madras

dictated 15th

October 1870:

No 6687-10 of June 1904.

Encls. 6. 10/24/68/20

dark stains. — *Donnelly*

for consideration of funds, the

Remarks of the 49: Chief Engineer

for dissipation on the plane
 instead of merely in the void.

prepared & presently in the hands
of the Chief Engr: for construction.

Advised to the Council by Henry James

thanks to the thousands of
volunteers and staff.

talent; and requesting of him

Instructions as to the plan

of services to be accepted

8

~~CONFIDENTIAL~~

The Supr Engineer's
" Chief Engr of
brigations
Dec 12/11/71

C/1034/168/4122

Govt. of 1870 Madras.

PUBLIC WORKS.

To The Dy. Superintending Eng.
S. L. Curran

Date

Recd

De. 10/11/70 2694.

Nos. 177 @ 179

Tanks. The State by the Chief
Eng. for irrigation in the
appeal of the Superint. of the 5th
Div. directing to the alteration
of the designs of the sluices to
certain tanks in the Salem
District, Com. 9. to the Dy. S.
Officers concerned with in-
structions.