

(1) Number of pages _____

(2) Date of repair _____

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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	2927	Press
B.P. No.		Mis.
Dated	2-11	1876
		195

Not to be folded or roughly handled

PROCEEDINGS OF THE MADRAS GOVERNMENT.

~~Under date the~~

Read the following

Note by
the Chief Engineer for Irrigation
No. 233 W dated 20th Octr 1876.

Order thereon November 1876

The following Estimate
from the Salem Range forwarded
by the District Engineer Salem is
sanctioned:-

Chinnappetty Tank

1 Extending the existing	Irrigation Ordinary Aqueduct Original Works.
main weir	Rs 5515

2 Raising and repairing the land & repairing the apans of the sluices & weirs 18 th	Repairs. 2085
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Total Rs 7600

2. This sanction has been registered as.
No 173 I of 1876-77.
(True Extract)

Colonel
The District Eng^r Salem. off^r Under Secy. B. G. S.

OFFICE OF THE CHIEF ENGINEER

FOR IRRIGATION,

1876.

No. 233-41

Note by Chief Engineer for Irrigation.

Encls. 8

No. 103

Dated 3rd
March/76

The District Engineer, Salem
forwards, with his letter marginally noted, an Estimate in connection
with the Chinnappanputty Tank situated in the
Trichengode Taluq, Salem Range.

2. The nature of the work proposed for execution and the heads of account
to which it is chargeable are as follow:—

Ordinary Agricultural
Original works

Extending the weir

Rs.

5315

Raising and repairing the bund and
repairing the aprons of the sluices and

2085

Kalingulak Repairs

Total Rupees 7600

3. The following particulars of this Tank are recorded —

Ayacut area. 400 Acres

Assessment. 3998 Rupees

Average revenue. 2364 Rupees

Highest do. 3456 Rupees

Expenditure during the previous four years. 3850 Rupees

The area of the catchment basin is 290 square miles; the maximum flood supply is calculated at 24533 cubic feet per second for discharging which, as surplus there are two weirs, one 142 feet in length and the other 55 feet, and one Lahagalah 66 feet in length. It is proposed to abandon the weir 142 feet in length and to raise a bund before it so as to ~~close the breach at the right end of the weir~~ ^{close the breach at the right end of the weir} the ~~homalov river which passes through this tank~~. The large weir 55 in length is to have an addition to it of 50 feet, and the total length of the surplusing works will be 112 feet which with a head suggested of 4 feet will probably suffice. The tank belongs to the Homalov river group and was inspected by the Chief Engineer for irrigation at the end of 1874 and the leading requirements noted. The details were subsequently somewhat modified to suit the circumstances as reported by the District Engineer. The tank was breached in 1872 and its early restoration is very desirable there having been already far too much delay in preparing and disposing of the estimate otherwise the revision by the District Engineer would have been considered necessary first with regard to many of the details, and only in order that the requirements of the

Inspection Notes
para 8. 8th
May 27/75 A. 1131

Memorandum
Oct 22/75

Inspection
Notes para 8

the tanks under the two channels supplied from this tank might be ascertained. The datum line for the longitudinal section has been taken at 42 feet below the north end of the bund, and apparently the crest of the 142 feet weir is at 47.56 feet above this datum, the intended full tank level being at 47.66. The future F.T.L. will therefore approximate sufficiently closely to the former F.T.L. M. W.S. is reported to be 4 feet above F.T.L. and this is believed to be an inside calculation as though excessively heavy rainfall has occurred in recent years in parts of the Salem district, it is improbable that such falls would take place over such a large catchment basin as that of this tank. At any rate the old weir suffered for many years, and the discharging capacity of the extended weir will very greatly exceed that before available. The crest of the 66 feet weir at the north end should, as before intimated, be raised to 1 foot above F.T.L. as the discharge is into the North Channel which would suffer again, as it has done before, were the surplus not limited

as much as possible
The new short length of bund
which is to be thrown up across the breach
and in front of the old weir, will need
to be very carefully carried out. There is
rock at the bottom of the breach and rock
is probably not far from the surface at the
side for the bund. If so a trench 4 feet wide
and 2 feet deep should be cut in the rock on
the line of the front top edge of the bund to
form a watertight junction. The ends of
the old bund at its junction with the new
should also be stopped and trenched, so
that the new and old earthwork may be
thoroughly united and all danger of
leakage averted. The foundation of the
revetment of the new bund is shown as
intended to be 6 feet ^{which is excessive} deep. It is believed
that there is rock above this level, and if
rock be met with within 4 feet, the revetment
should rest thereupon. The foundation should
also be laid so as to carry the weight of
the revetment above i.e. with its faces
parallel to those of the superstructure. The
latter as drawn would not be as effective
as is desirable and through stones laid
at right angles to the slope, with for the
rest of the work face stones not less than
half the thickness of the revetment, and
varying from that to two thirds of the

thickness are necessary to good work. 7
The old revetment of much of the
bund is, as is common at tanks in the Salem
district, laid at a very steep slope. Some
of it has to be raised considerably and
care must be taken that the old revetment
is perfectly stable. To reform it generally
would probably involve needless expense,
so that all that is quite substantial
may be retained.

It is not clear why the extension
of the main weir from 555 to 553 ft should
be laid out on a crooked alignment.

A regular curve would be better, unless
the peculiarities of the ground indicate
the alignment shown to be proper. A
flat slope to the apron and a drop of
3 feet at the end is not usually a good
arrangement, and were it for any special
reason suitable, the end of the apron should
be built of picked stones of very large
size, laid on the flat. It will apparently
be better to increase the slope of the apron
to 1 in 6, to place its surface at the
junction with the crest wall one foot
below the top of the latter, and to form
the surface of the slope with stones
not less than 2 feet long, laid with their

length at right angles to the slope. A width of 1 foot of the slope next the crest wall to be grouted in with concrete as apparently intended. The cross section of the existing part of this weir is shown as if the crest wall were at present at F.S.L. but this is believed to be incorrect. If the old apron has a drop of 3 feet at its end and is in good order, this apron and the new may be connected by a rubble masonry wall 2 feet thick and 3 feet deep below the surface of the new apron.

The wing wall at the higher part is rather weak in section. It should have a face batter of 1 in 6, be two feet thick at top and not less than 3 feet at base where 14 feet high. If the wing return must be 3 feet higher in length of 6 feet is inadequate, with other outer ends of the apron. It must be arranged so that its height of 3 feet will suffice and the section with a face batter of 1 in 6 will suffice. This return should leave a revetment to the bank slope connected with it and not less than 6 feet of horizontal apron at the foot of the slope.

The bed of concrete under the apron is unnecessary.

10. The wings of the 66 feet weir should be raised with face batters of 1 in 6. If the wings of the 18 head sluices are only 18 inches thick the old wings must be dismantled, and rebuilt with a mean thickness of not less than 2 feet where the height is 8 feet; or 1 foot may be added to the thickness of the present walls and the upper wall be built with a face batter of 1 in 4.

11. In carrying out the work, the bund for the extension of the main weir should first be cleared away, and the crest wall built to 3 feet below F.S.L. and be protected by the rough stone below the level of the apron surface stones. Then the bund across the breach may be constructed. When this has been completed the weir should be finished.

12. The modifications above detailed will not, it is considered, increase the estimate, but the District Engr. should revise the latter if necessary apply for sanction for the revised estimate.

13. Where new earthwork has to be laid on the rear slope of the old bund the latter should be stepped as shown on cross section.

Section 177. It is the duty of the

Colonel of the
Chief Engineer for Migration

To

The Secretary to Government
Public Works Department

177

The Chief Engineer for Migration
The Secretary to Government
Public Works Department

Section 177. It is the duty of the

To

Colonel of the
Chief Engineer for Migration
The Secretary to Government
Public Works Department

5

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" 25-8-75 - 1421

" 6-7-75 - 1895.

Incl. Ch. Eng. Cl. 2099 & 2191 of 1875
& Memo. No 1250 of 22^d Oct 1875
in orig.

1876.

From
The Chief Engineer for Irrigation
To The Secretary to Govt.
P. N. D.

Dated 25th October 1876.
Recd. 30th —

Encls. 8

No 233-W.

Chinnampurputty Taluk - Salem
District - Note submitting, for
sanction, with modifications,
Settinate for Rs. 7,600 for certain
works to the —

12/7

Am 31-10-76

(13)

A copy of Mr Mullins
note in connection
with the Chinnampurputty
Taluk - Salem
should go with the

order

Dr. H.

All hands are very
busily engaged in
this office. - If you want
a copy of this Memo to go
to the D. E. with the memo.
- script - G. A. please get
some one in your office
to copy this - P. N. D.

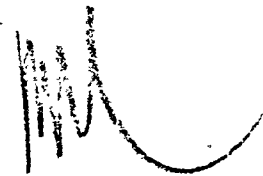
M. D.

No. 2927 of 2 Nov 76
 Proceedings of the Madras Government
 Read the following

From
 The Chief Eng^r for Irrigation (1886 No. 2331 of 20th Oct 76)

The following Estimate from the Salem Range forwarded
 by the District Engineer, Salem is sanctioned:—

Chinnapenpatty Tank.



Irrigation.

1. Extending the existing Ordinary Agricultural
 main weir Original Works
 Rs. 5515
2. Raising and repairing the
 head & repairing the apron & repairs 2035
 of the sluices & balancing lock

Total Rupees. 7600

2. This sanction has been registered as No. 173 I. of 1876-77.

C. H. S.

by 29/10

G. M. S.

To
The H. G. Salen

Dated

Loved

Recd

G. O., 2nd Nov^r 1876, No. 2927-

Nos. 7-8

Minapenputty Tank
Palem Dist. —

Sanctioning intimate of
res 7600 for work to the

Lat. no. 11. 10
10-11-16