

(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.

~~B.P. No.~~

542-543

1411

(2)

Press

Misr

Dated

25-6-1874 195 .

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
25th June 1874.*

No. 542. Read the following endorsement of the Chief Engineer for Irrigation, dated Ootacamund, 22nd May 1874:—

From Captain R. F. TAYLOR, Acting District Engineer, Kurnool, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Kurnool, 5th May 1874, No. 3.

I have the honour to forward a copy of reply given by Mr. Vardon to the questions asked in G. O., No. 2,592, of the 23rd October 1873; it seems to me that Mr. Vardon has shown a surprising want of tact in the treatment of this work, his repair estimate (which includes all masonry works) amounts to 1,17,000 Rupees, and this is a sum I am by no means inclined to ask for.

2. I am engaged in drawing up a report on this tank, and will send it in the moment I have obtained certain information from the Collector.

From Mr G. A. VARDON, Officer in charge of Nundial Range, to Captain R. F. TAYLOR, Acting District Engineer, Kurnool, dated Kondanampalli, 26th February 1874, No. 616.

With reference to G. O., No. 2,592, dated 23rd October 1873, I have the honour to submit the following explanation.

2. As regards the design for reconstructing Calingulah No. 3 of Nundial tank, submitted by me to you with my letter No. 86, dated 28th May 1873, I have to remark that it is based on the design for a new calingulah lately constructed to the Matulpaud tank in the Sirwell Taluq, costing Rupees 2,740, and which design was in accordance with one drawn in pencil in the office of the Chief Engineer for Irrigation, and sent to me for guidance; this design provides a masonry body wall, an upper apron of masonry resting on a bed of concrete, with a lower dry rough stone apron, and the upper apron being supported by a masonry retaining wall, and this is exactly the principle of the design observed in the calingulah for the Nundial tank; objection, however, is taken to it that it provides for more masonry than is absolutely necessary, but the difference in the two localities required this: in the case of the Matulpaud tank the ground behind the calingulah is about 9 inches below the bed of the tank just above and in front of the body wall, whereas in the case of the Nundial tank the crest of the calingulah is 9½ feet above the ground below the calingulah, and this fall has been overcome by a series of steps; further, if Rupees 2,740 can be spent in constructing a calingulah to a tank that pays a revenue of Rupees 4,390, surely Rupees 4,660 is not too much to reconstruct a calingulah to a tank that pays more than Rupees 10,600 a year.

3. The next point that requires explanation appears to be to state why the work was commenced on emergency before the design was formally sanctioned.

4. I infer from paragraph 1 of the Note by the Chief Engineer for Irrigation that the reconstruction of Calingulah No. 3 was urgent, as it is stated that "Mr. Fraser was also authorized to prepare materials for extending No. 3, the principal surplus escape;" further, when I inspected the tank on 26th April 1873, I remarked as follows in my diary for that month, "I examined this calingulah minutely and found that the body wall is undermined and a portion of the back washed away; the apron is in very bad order, and, in my opinion, the calingulah will not stand the rains of 1873, so I have ordered it to be reconstructed at once in anticipation of sanction; the plan and estimate for rebuilding it will be shortly submitted for sanction," and accordingly on 28th May 1873 I submitted the promised plan and estimate with report.

5. In commencing work before receiving formal sanction, I simply adhered to the rules of the department where emergent work can be done to an irrigation work to avoid damage or prevent loss of revenue to the State, and this rule I have followed for the last 18 years unquestioned, and in this case if I had not reconstructed this calingulah to an important tank like the Nundial one, paying more than Rupees 10,000 a year, and the calingulah was in consequence

*Proceedings of the Madras Government, Public Works Department,
25th June 1874.*

washed away, I would have been blamed in respect of duty; and as to the design, if I had been informed as soon as my plan reached the District Office of any alterations needed to it, I would have been only too glad to carry out such alterations. For during the whole of May 1873 we were employed chiefly in preparing materials, chiefly gone to prove that the calingulah was not constructed before the design had been sent to the District Engineer for approval, not long before the estimate was sent forward for sanction.

6. From 26th April to 28th May 1873, about a month, I was employed with other duty in the Range, and as soon as I was in possession of every information on which to base my design for restoring the calingulah I made no delay in preparing the plan and estimate, which were, as remarked above, forwarded to the District Office on 28th May 1873.

7. Only 116 feet in length was reconstructed, which is the length of the old escape between the wings, which were not touched.

8. Trusting this letter explains every point required in the order of Government.

SUBMITTED to Government with reference to G. O. of the 23rd October 1873, No. 2,592.

First, the delay in this matter in dealing with the estimate of 1871 for this tank has to be explained. It was observed in 1871, the late Major Ryves being Acting Chief Engineer for Irrigation. This officer was then very ill, and died shortly afterwards. When Major Oakes took charge in September 1871 a list of papers undisposed of was prepared for him, and it seems probable that this estimate, which was included in that list, was either overlooked, or that there were more papers to be disposed of than he could manage.

When I returned from England at the end of November 1872, the estimate was brought forward in a list of papers requiring despatch, and in its turn it was examined and returned for revision at the end of March 1873.

2. From the explanatory letter from Mr. Vardon, submitted by Captain Taylor, the District Engineer, it appears that the former inspected the Nundial tank in April 1873, found the calingulah in question much out of repair, and prepared a design and estimate which he submitted on the 28th May, and reported that he had ordered its reconstruction in anticipation of sanction. Mr. Vardon's proceedings therefore cannot be deemed open to objection. On the 7th August following, the late Mr. W. Fraser, then District Engineer, reported that the reconstruction of the calingulah had been undertaken on emergency, and although he says "the design is not exactly what I would myself prefer," he took no steps to alter it, although at the end of May any change considered necessary might have

been made. The design was not transmitted with the letter of the 7th August, and, as already stated, Mr. W. Fraser's

proceedings were, in a memorandum of the 20th August, disapproved of.

3. Mr. Vardon's letter shows that the calingulah, or rather surplus weir, has been reconstructed with its original length of 116 feet, although in the estimate of 1871 provision was made for adding 240 to it, and this addition had been, after examination, found to be necessary, and had been approved of. Consequently a very large sum has been very unnecessarily spent in reconstructing an altogether inadequate work.

*Proceedings of the Madras Government, Public Works Department,
25th June 1874.*

4. Mr. W. Fraser, whose responsibility for this gross mismanagement appears to be complete, died recently.

5. Mr. Vardon (paragraph 2) appears to think that because the revenue of the Nundial tank is considerable* therefore no objection should be made

* More than 10,000 Rupees a year.

to an outlay of Rupees 4,660 upon a surplus weir, but the one question is was this outlay necessary; and to this the answer must be that it certainly was not necessary; the design is altogether inappropriate, a body or crest wall 12 feet in height does not need to be 8 feet thick at base; an overfall of 2 feet on to the first step of the apron does not require $7\frac{1}{2}$ feet of masonry and 1 foot of concrete to sustain it, 2 feet or 1 foot would have been most ample. This one surplus weir, extended to its full length of 356 feet, would at this rate cost Rupees 14,300; whereas the Rupees 4,660 already spent would, with a little judgment, about have sufficed to construct the whole 356 instead of the 116 feet. These remarks have been added in order that Mr. Vardon may not continue to suppose that there is any connection between the design of this waste weir and arrangements which have been approved by this office.

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 543.

ORDER THEREON, 25th June 1874, No. 1,711.

IRRIGATION, No. 44.

THE late Mr. W. Fraser who, as District Engineer, Kurnool, was responsible for the very unsatisfactory way in which

No. 3 surplus weir of the Nundial tank has been dealt with, for the considerable waste of money incurred, and for the omission to lengthen this escape as had been decided to be necessary, having recently died, further notice of the mismanagement is not called for.

2. The present District Engineer's attention will be called to the history of this work, and he will take care that Mr. Vardon is duly informed of the mistakes made by him in designing it, and that all plans of masonry works are examined and passed by competent authority before actual construction is commenced.

3. The Government desire to be informed whether the memorandum No. 190 of the 27th March 1873, from the Chief Engineer for Irrigation, had been communicated to Mr. Vardon or any instructions therefrom sent to him, at the time he transmitted his design and estimate for the reconstruction of the surplus weir to the District Engineer, and proceeded to commence the work.

(True Extract.)

Lieut.-Colonel, R.E.,

Joint Secretary to Government.

To the Chief Engineer for Irrigation.

„ District Engineer, Kurnool.

Exd. S. T. Austin.

Spare Copies.

No. 616

Kondanainpalli

21st February 1874.

From,

The Officer in Charge
Kandial Range.

To,

The District Engineer,
Munrool.

Sir,

With reference to G. O. No. 2592
dated 23rd October 1873, I have the honor
to submit the following explanation.

2. As regards the design for
reconstructing Calingulah No. 3 of
Kandial Tank, submitted by me
to you with my letter No. 86 dated 28th
May 1873, I have to remark that it
is based on the design for a new
Calingulah lately constructed to the
Kutialpand Tank in the Sirval Taluk,
costing Rupees 2750, and which design

This design seems to have
been referred to the
District Engineer for his
approval. No. 1016 - 1874

was in accordance with one drawn in pencil in the Office of the Chief Engineer for Irrigation, and sent to me for guidance, this design provides a masonry body wall, an upper apron of masonry resting on a bed of concrete, with a lower dry rough stone apron, and the upper apron being supported by a masonry retaining wall, and this is exactly the principle of the design observed in the Calingulah for the Kandial Tank; objection, however, is taken to it that it provides for more masonry than is absolutely necessary, but the difference in the two localities required this; in the case of the Mutiala Pand Tank the ground behind the Calingulah is about 9 inches below the bed of the tank just above and in front of the body wall, whereas in the case of the Kandial Tank, the crest of the Calingulah is 9 1/2 feet above the ground

below the Calingulah, and this fall has been overcome by a series of steps; further, if Rs 2,740 can be spent in constructing a Calingulah to a Tank that pays a revenue of Rs 4,390, Surely Rs 4,660 is not too much to reconstruct a Calingulah to a Tank that pays more than Rs 10,000 a year:—

3. The next point that requires explanation appears to be to state why the work was commenced on emergency before the design was formally sanctioned.

4. I infer from para I. of the Note by the Chief Engineer for Irrigation that the reconstruction of Calingulah N. 3 was urgent, as it is stated that "Mr. Fraser was also authorized to prepare materials for extending N. 3, the 'principal surplus escape'; further when I inspected the tank on 26th April 1873, I remarked as follows in my Diary for that month," I examined this

"Calingulah minutely and found that
"the body wall is undermined and a portion
"of the back washed away; the cren
"is in very bad order, and in my opinion
"the Calingulah will not stand the rains
"of 1873, so I have ordered it to be reconstructed
"at once in anticipation of sanction;
"the plan and Estimate for rebuilding
"it will be shortly submitted for sanction"
and accordingly on 28th May 1873, I
submitted the promised Plan and Estimate
with report.

5.- In commencing work before
receiving formal sanction, I simply
adhered to the rules of the Department,
where emergent work can be done to
an Irrigation work to avoid damage
or prevent loss of Revenue to the State,
and this rule I have followed for the
last 18 years unquestioned, and in this
case if I had not reconstructed this
Calingulah to an important Tank like

the Kandial one paying more than
Rs 10,000 a year, and the Calingulah was
in consequence washed away, I would
have been blamed for neglect of duty,
and as to the design if I had been
informed as soon as my plan reached
the District Office of any alterations
needed to it, I would have been only
too glad to carry out such alterations,
for during the whole of May 1873 we
were employed chiefly in preparing
materials, which goes to prove that the
Calingulah was not constructed before
the design - had been sent to the District
Engineer for approval, nor long before
the Estimate was sent forward for sanction.

6.- From 26th April to 28th May 1873
about a month, I was employed with
other duties in the Range, and as soon
as I was in possession of every information
on which to base my design for restoring
the Calingulah, I made no delay in
preparing the Plan and Estimate

which were, as remarked above, forwarded
to the District Office on 28th May 1873.

7. Only 46 in length, was
reconstructed, which is the length of
the old escape between the wings,
which were not touched.

8. Trusting this letter explains
every point required in the order
of Government.

I have the honor to be,

Sir,

Yours Most Obedt. Servant

/Sigsy G. A. Vardon.

Range Officer.

(True Copy.)

W. F. Dwyer Captain

of Distt Engineers

all
H

Comd. G.

ack

From C.E.
1/8/8/74.
The District Engineer
Kurnool.

To, The Chief Engineer
for
Irrigation

P.G. 2725 June 1/74
D.N. 57/2
P.W. 3567/74

Copy of a letter No. 616
dated the 26th February
1874 explaining the
circumstances under
which the ^{re}construction
of the Kandial ~~and~~
Calingulals was
undertaken.

District Engineer's Office
No. 3 Kurnool 5 May 1874
From, The Dist. Eng.
Kurnool

To, The Chief Eng.
for Irrigation

Sir, I have the honor to

forward a copy of reply given
by Mr Varden to the questions
asked in G.O. No. 2592 of the 23rd

October 1872, it seems to me that
Mr Varden has shown a sur-

prising want of tact in the
treatment of this work, his

repair Estimate (which in-
cludes all masonry works) amounts

to One lac and Seventy thousand
rupees, and this is a sum I am

by no means inclined to
ask

ask for.

I am engaged in drawing up a report on this Tank and will send it in the moment I have obtained certain information from the Collector.

I have the honor to be
Sir

Yours most Obedt Servant

W. F. Fugler Captain
Ag. Dist. Engineer

Compd. G.

45. 11.8
11.6

20. The Chief Engineer
for navigation
Pg 25 June 1/74
Butler 5 Aug 5/74
Ques. 9th May 74
No. 3. Aug 2
Pg 25 June 1/74
Forwarded copy of
a letter from Mr.
Kadon explaining
the circumstances
under which the
reconstruction of
the Portland Bank
Embargo was
undertaken.

Dec. 10. 870
 New York
 The District Engineer
 New York

Letter No 3 of 5 May 1874 from Mr. Engineer
Hurnool with its enclosure.

Submitted to Government with re-
ference to G.O. of the 23^d Feb. 1873. P. 2592.

First the delay in this Office in dealing with the estimate of 1871 for this Trust has been explained. It was received in 1871, the late Major Rymer being Actg. Chief Engineer for Emigration. This officer was then very ill, and he died shortly afterwards. When Major Baker took charge in September 1871 a list of papers undispensed of was prepared for him, and it seems probable that this estimate, which was included in that list was either overlooked or that there were more papers to be dispensed of than he could manage.

When I returned from England at the end
of November 1872, the estimate was brought
forward in a list of papers requiring dis-
patch, and in its turn it was examined
and returned for revision at the end of
March

March 1873.

2. From the explanatory letter from Mr. Vardon, submitted by Captain Taylor the D. Engineer, it appears that the former inspected the Manual Tank in April 1873, found the Caluigulak in question much out of repair and prepared a design and estimate which he submitted on the 28th May, and reported that he had ordered its reconstruction in anticipation of action.

Mr. Vardon's proceedings therefore cannot be deemed open to objection. On the 7th August following the late Mr. W. Fraser, then D. Engineer, reported that the reconstruction of the Caluigulak had been undertaken on emergency, and although he says "the design is not exactly what I would myself prefer" he took no steps to alter it although at the end of May any change considered necessary might have been made. The design was not transmitted

It is dated 14 Sept.
appears to have been
received on the 15th

transmitted with the letter of the 7th August, and, as already stated, Mr. W. Fraser's proceedings were in a memo. of the 28th August disapproved of.

Memo. No 190 of
27 March 73.

3. Mr. Vardon's letter shows that the Caluigulak or rather surplus weir has been reconstructed with its original length of 116 feet, although in the estimate of 1871 provision was made for adding 240 to it, and this addition had been, after examination, found to be necessary and had been approved of. Consequently a very large sum has been very unnecessarily spent in reconstructing an altogether inadequate work.

4. Mr. W. Fraser, whose responsibility for this gross mismanagement appears to be complete, died recently.

More than 1000000
a year

5. Mr. Vardon (para 2) appears to think that because the revenue of the Manual Tank is considerable therefore no objection should be made to an outlay of Rs. 4660 upon a surplus weir, but the one question is

is - was this on any necessary, and to this the
answer must be that it certainly was
not necessary: the design is altogether in-
appropriate: a body or crest wall 12 feet
in height does not need to be 8 feet thick
at base, an overfall of 2 feet on to the first step
of the apron does not require $7\frac{1}{2}$ feet of
masonry and 1 foot of concrete to sustain it,
2 feet on 1 foot would have been most ample.
This one surplus weir, extended to its full length
of 350 feet, would at this rate cost \$14,300;
whereas the \$600 already spent would,
with a little judgment ^{about} have sufficed to
construct the whole 350 instead of the 110 ft.
These remarks have been added in order
that Mr. Varden may not continue to suppose
that there is any connection between the de-
sign of this waste weir and arrangements
which have been approved by this Office.

Attest and
22 May 1874 }

John W. Jones Lieut Col. R. K.
Chief Engineer for Irrigation.

To
The Secretary to
Govt. P. H. D.

P. W. 1874 Report.
No. 3567.
From.

The Chief Engineer
for Irrigation

Dated 22nd May 1874.
Recd 12th June 1874.

Enr. 2.

Submitting
with observations
a letter from the
Dist. Engr. Turnool
relating to the
re-construction of
the Kundial Tank
Calingulah.

Q. No. 1711. 25-6-74

No 542

1711

Public Works Department

Proceedings of the Madras Govt.
Read the following

From
The Dist. Engineer

Turnool (No. 8. No. 3 dated
5 May 1874)

There is a most unsatis-
factory case -

The work was
not of order and two mat-
ters needed rectification

(1) The weir was too short
(2) The houses were out of
order. The first point had been
discussed & it had been
determined to lengthen it.

As Mr. Hardman was of the
opinion when he undertook
to carry out his work in the
construction of the weir and
the houses - I do not know
whether he has not been
blamed for this point.

(2) As regards the houses, the
fact is that they were not
of a good quality.

The late Mr. H. Fraser
who, as District Engineer,
Turnool, was responsible
for the very unsatisfactory
way in which No. 3 surplus
weir of the Kundial Tank
has been dealt with, for the
considerable waste of money
incurred, and for the omission
to lengthen this weir as
had been decided to be ne-

cessary, having recently
died, further notice of the

mismanagement is not called for.

2. The present District Engineer's attention will be called to the history of this work, and he will take care that Mr. Vardon is duly informed of the mistakes made by him in designing it, and that all plans of masonry work are examined and passed by competent authority before actual construction is commenced.

Diff. but the whole affair depends on the capacity of the budget for the first part.
2/6 R.C.

May 25/97

542-543

3. The Government desire to be informed whether the memo of 1904 has been communicated to Mr. Vardon or any instructions thereupon sent to him, at the time last transmitted.

design and estimate for the reconstruction of the surplus weir to the District Engineer, and proceed to commence the work.

To the Chief Engineer for S.E. & S. Copies despatched to the
S.E. & S. 4/7/94

May 4/6 R.C. 9/94

3567 ✓ ★

Cont. of 1874 Index

PUBLIC WORKS.

Re L. Ingr. for L. Ingr.

Date

Re

Encl. 2

o. 25/11/1874 No. 1711

No. 562-563.

Funclal Tank - Removal of

Passing orders on the sub:
of the mistakes made
connection with the re-
struction of the surplus
the tank and the
other slips to be taken
into regard to the work.