

(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. 1390	Press Mis.
367-68	
Dated 20 5 18 71.	

Not to be folded or roughly handled

[Signature]

No 17 Superintending Engr's Office
Coimbatore 27 April 1871.

From Lt Colonel W. Farewell S.C.
Ag. Superintending Engineer
7.8.71

To Colonel G. A. Orr A.C.
Secretary to Govt. B.C.W.
Madras

Sir,

Enclosures
Estimate &
Comparative
Statement No
4470. —

With reference to para 2 of G.O. No
2353, dated 29th September 1870 I have
the honor to submit a Revised Estimate
for the construction of the sluice in the
Cotacamund Lake Dam together with
a comparative Statement showing
cause of the excess over Original Estimate
viz Rs 1150. The Range Officer reports that
"Nearly one half of the excess over the
" original Estimate has been caused by
" the large quantity of powder and
" fuse which had to be used in
" getting out the foundations and
" the necessity of employing Blacksmiths
" to sharpen pickers &c. Boulders of rock,
" too big to be removed by labour alone,
" were met with all the way down. These
" boulders were embedded in earth. Thus
" no saving could be effected in the foundation,
" as it was of course a matter of moment

to avoid laying the structure upon a
"foundation" formed partly of earth, and
"partly of rocky boulders. In three places
"thin sheets of rock standing almost
"vertical and running transversely to
"the line of the Sluice were met with
"but they unfortunately lay below the
"side of the body of the Sluice. They certainly
"aided in increasing the stability of the
"sluice by offering a natural wall against
"which the whole structure may be
"said to abut; but they did not
"save any thing in foundations. -

5 The excavation for the Sluice
"was begun on the 15th of July 1870 and was
"completed on the 23rd of February 1871. An
"average of 50 prisoners were employed upon
"it daily for the above 7 months and they
"excavated a large pit 20 feet deep 24 feet
"wide and 150 feet long. -

6 The rates in the Original Estimate
"for "Superstructure" and "Stone Arching"
"proved insufficient from the necessity
"of procuring all the cut stone from Cornwall.
"The stone at the Sluice site is of such a
"nature that it cannot be worked with
"the chisel at any reasonable cost, as
"I thought it might have been when

framing the first Estimate. For every
"chisel stroke that the Cornish stone needs
"the Sluice stone needs one hundred; more.
"over it is of so tough a nature as not
"to split in any direction. The stone cutters
"would not take any contract for the
"Sluice stone; I tried them on daily labor,
"but was soon convinced that the stone
"was unworkable. The rate for the brick
"arching has been increased from the
"necessity of my having to make up the
"Contract. When framing the original Es-
"timate I had hoped to have procured
"this from the Lawrence Cylburn Works. But
"on enquiring, I found there was only one
"Contract there of the required dimensions.
"and six others had to be made up afresh.
"A specified rate for the Sluice gate
"was not entered in the Original Es-
"timate as it was thought that it
"might be met out of the Contingencies.
"But all the Contingencies of the Revised
"Estimate have been swallowed up
"by the supervision which it has been
"necessary to obtain for overlooking
"the Prisoners during the many months
"that they have been employed on the
"work, and also in sundry expenses,
"such as repairs to wheelbarrows, Baskets &c.
"7. Convict labor has been utilised

"as far as possible, so much so that if the
"work which has been done by the Prisoners
"be calculated at the rate at which it
"would have been done by Coolies, the
"Estimate would amount to not less
"than Rs. 8,000. —"

2. The Revised Estimate amounts to
Rupees 44,70 of which amount Rs. 3,320 have been
expended up to the 31st of March 1871. Rs.
1150 require to be allotted for expenditure
in the current year. The work is one
that cannot possibly be postponed
without danger. I have therefore
authorized its being pushed on with
as quickly as possible in order that it
may be completed before the monsoon,
which step I trust the Government
will approve of, and allot the funds
required.

I have the honor to be,
Sir,

Your most Obedt. Servt.

W. H. Smith, Lieut. Colonel S.C.
Dy. Supg. Engineer, 7th Division

Off. Works Department

1871 (May)
No. of Port 1938

From
The Supy Engineer
7th Division

To
The Secretary to Govt
S.O.W. Madras

Dated 24th
18th April 1871
Encls. 2.

Submits a revised
Estimate for Constructing
a sluice in the Arakam
Lake and solicits sanction

No 1390-20th May/71

No 367

65 May 71 A. 4th

Public Works Department
No 1390
Proceedings of the Madras Government
Under date 20th May 1871

And in the following

From The Superintending
Engineer 7th Division

No. 1390-20th April 1871

In G.O. No 2353 dated
29th September 1900 sanction
was accorded to an estimate
of Rs. 3320 for the construction
of a sluice in the bank
at the lower end of the
lake at Arakam.

The Acting Suptg
Engineer of the 7th Div
now submits a revised
estimate of Rs. 4,470 for
the work, and explains
that the excess of Rs. 1,150 is

the first estimate is due
chiefly to the cost of blasting
large boulders of rock
which could not be
removed by manual
labour; to the price pro-
vided for superstructure
that is rubble masonry
and arch work of cut
stone having proved
insufficient owing to
the cut stone having
to be procured from
Concor instead of on
the site of the work,
and to its having been
found necessary to make
up new centerings for

the archwork instead
of using old ones from
the Lawrence Asylum
Works, as had been
intended but which
were found not to be
available, and to the
omission to specially
provide for a sluice
gate in the estimate
as it was hoped that
the item of contingencies
would cover the cost.

Under these ex-
planations His Ex-
cellency, the Gov.
in Council sanctions
the revised estimate,

Pro 29 September / 10 N 513 - 514

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(15)

and a provision of the
superintending magistrates
proceedings as reported
in para 2. The sum
of Rs 1150 needed to
complete the work
will be allotted from
the Reserve in the
Provincial Budget.

H.

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To
The Superintending Magistrate
5th Conts of P. N. Accounts
3rd Commisary of the hill
Actg Chief Magistrate
22nd May 1878

26 May 11 R. 95

1871
Govt of 1871 Madras.

PUBLIC WORKS.

1. *Chief Engineer
for Irrigation*

Dated.

Recd.

Encl.

G. O. 20 May 1871, No. 1270-

Nos. 367 & 368.

Estimate for the

Estimate for the
construction of a dam in the
river at the place called
Katakam Lake, Taluk -
Tamil; the object of the
dam is to facilitate the
completion of the work
here the person, above.