

(1) Number of pages _____

(2) Date of repair _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2353	Press
513-14	Mis-
Dated 29 7 1870.	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
29th September 1870.*

No. 513. Read the following memorandum from the Acting Chief Engineer, for Irrigation, to the Secretary to Government, Public Works Department, dated Ootacamund, 26th August 1870:—

His Excellency the Governor having considered it advisable to place a sluice in the bund at the lower end of the Ootacamund lake, with a view to allow of the water level being lowered sufficiently to admit of the upper lake near the bazaar being cleaned, and deepened where there is not sufficient depth of water at present to prevent injurious exhalations from the bed, an estimate, amounting to Rupees 3,320, has been prepared by the Executive Engineer, Neilgherry Range, and is now submitted for the consideration of Government. The sluice will also be useful as a surplus work in the event of a recurrence of the floods, which have on more than one occasion either breached the lake bund, or endangered its safety.

2. Until the excavations for the sluice are taken out, it will not be practicable to say whether additions to the rear apron of the sluice may not be necessary. The arrangements, as designed, will suffice if hard soil and boulders are found at about the level of the rear apron, and, on the other hand, much of the work below the upper floor level may be dispensed with if rock foundations can be obtained.

3. The sluice cill is intended to be placed at 9 feet below full tank level. Its vent is to be 3 feet $\times$ 3 feet, and, the area of the lake being about 600,000 square yards, it is calculated that the sluice would, if no accessions of supply be received, lower the lake surface 9 feet in about 9 days.

4. The proposed diversion of the road over the present bund, and the sluice site, are shown in the survey and sections attached to the sluice plan. It may be found that the excavations will stand without risk of slips at a steeper slope than has been allowed for in fixing the distance from the present bund top of the sluices, and, if so, the latter may be placed some feet nearer to the present road as this would save earthwork in the approaches.

5. The details of the sluice gate are not shown in the plan; the shutter should be of teakwood 3½ feet wide and 4 feet high, bound with iron, and sliding in grooves the rear or bearing face of which should be rubbed smooth; the shutter or gate should be worked by a screw and met with a lever key to the latter.

No. 514. ORDER THEREON, 29th September 1870, No. 2,353.

CIVIL WORK, No. 43.

THE Government observe that the sluice, for which an estimate, Rupees 3,320, has been submitted by the Acting Chief Engineer for Irrigation, is intimately connected with the reclamation scheme at the upper part of the lake, which latter has been deemed of great importance to the health of the Ootacamund bazaar, and to the convenience of the inhabitants. The upper part of the lake has silted up greatly of late years from the washings of the bazaar and of the hills in the neighbourhood; and, in reclaiming the swampy ground, it is advisable that the more shallow parts of the water-spread to be maintained should be deepened, and the aquatic plants removed, so that there may be a moderate depth of clear water up to the edge of the lake; the actual depth at the edge, which should, opposite the bazaar and elsewhere so far as stone may

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29th September 1870.*

be available, be revetted, should be a foot or 18 inches, rapidly shelving to 3 feet. It is probable also that in future years some clearances will be necessary from time to time near the mouths of the flood-water and drainage channels which discharge into this part of the lake, and the sluice will be of permanent utility for regulating the water level for this and similar purposes, as also for discharging surplus water at times when the existing escape is too small to get rid with sufficient rapidity of the very large supply which the lake occasionally receives.

2. The Government resolve therefore to approve of the estimate for the sluice, and, with regard to the provision of funds, it is understood that the Commissioner of the Neilgherries will be able to meet about half its cost out of reclamation money at his disposal; the balance required will be provided under the head of Miscellaneous Public Improvements as soon as possible after a report shall have been received of the exact sum to be thus contributed, which will be ascertainable when the foundations have been taken out to the depth which the nature of the soil may show to be requisite.

3. The construction of the sluice will be commenced at once, and convict labour should be utilized as far as possible so that the money outlay on this work may be reduced to a minimum.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Acting Superintending Engineer, 7th Division.

" Commissioner of the Neilgherries.
" Controller of Public Works Accounts.
" Acting Chief Engineer for Irrigation.

Exd. S. T. Augustin.

Memorandum

His Excellency the Governor
having considered it advisable to place a sluice
in the bund at the lower end of the Ottacaimund
lake, with a view to allow of the water level
being lowered sufficiently to admit of the up-
per lake near the bazar being cleared,
and deepened where there is not sufficient depth
of water at present to prevent injurious ex-
halations from the bed, an estimate amount-
ing to Rupees 3,320 has been prepared by the
Executive Engineer Neilgherries Range, and is
now submitted for the consideration of Govern-
ment. The sluice will also be useful as a
simple work in the event of a recurrence of
the floods, which have on more than one occa-
sion either breached the lake bund or endan-
gered its safety.

2. Until the excavations for the sluice
are taken out, it will not be practicable
to

to say whether additions to the rear apron of the sluice may not be necessary. The arrangements as designed will suffice if hard soil & boulders are found at about the level of the rear apron, and on the other hand much of the work below the upper floor level may be dispensed with if rock foundations can be obtained.

3. The sluice sill is intended to be placed at 9 feet below full Tinto level. The vent is to be 3 feet x 3 feet, and the area of the lake being about 600,000 square yards it is calculated that the sluice would, if no accipions of supply be received, lower the lake surface 9 feet in about 9 days.

4. The proposed diversion of the road over the present bund, and the sluice site, are shown in the survey and sections attached to the sluice plan. It may be found that the excavations will stand without risk of slips at a steeper slope than has been allowed for in fixing the distance from the present bund top of the sluice, and, if so, the latter may be placed some feet nearer to the present road

road as this would save earthwork in the approaches.

5. The details of the sluice gate are not shown in the plan. The shutter should be of teakwood $3\frac{1}{2}$ feet wide and 11 feet high, bound with iron, and sliding in grooves. The rear or bearing face of which should be rubbed smooth. The shutter or gate should be worked by a screw and nut with a lever key to the latter.

Ootacamund 26th August 1870
Volundius
Acting Chief Eng^r for Irrigation
To the Secretary to Govt P.W. D.

1870 Dept
No. of Govt for September
No 3615.

From
The Asst Chief Engr for
Irrigation

By 26 Aug
No 13 Sept 1870.

En: 2.

Submitting an Es-
timate of Rs 3320 for a
 sluice in the bund at the
lower end of the Ooka-
cannund lake.

No 2353-29 Sept 70

No 2353 P.H.D.
Pro. of the Madras Govt.

Read the following

From the Asst Chief Engr
for Irrigation { P.H. 721 Aug 71 }

The Government
observe that the sluice
for which an Es-
timate, Rs 3320
has been submitted
by the Acting Chief
Engineer for Irrigation
is intimately connected
with the reclamation
scheme at the upper
part of the Lake
which latter has

been deemed of great
importance to the
health of the Colacimind;
bazaar, and to the
convenience of the
inhabitants. The
upper part of the Lake
has silted up greatly
of late years, from
the washing of the
bazaar and of the
hills in the neigh-
borhood, and in
reclaiming the swampy
ground, it is advisable
that the more shallow
parts of the water

spread to be main-
tained should be deep-
ened, and the aquatic
plants removed, so that
there may be a ^{clear} ade-
quate depth of water
up to the edge of the
Lake; the actual depth
at the edge, which should
opposite the bazaar,
and elsewhere so far
as stone may be avail-
able, be revetted, should
be a foot or eighteen
inches rapidly shelving
to 3 feet - It is pro-
bable also that in
future years some
clearance

clearances will be
necessary from time
to time near the
mouths of the flood
water, and drainage
channels, which
discharge into this
part of the Lake,
and the sluice will
be of permanent
utility for regulating
the water level for
this and similar pur-
poses, as also for
discharging surplus
water.

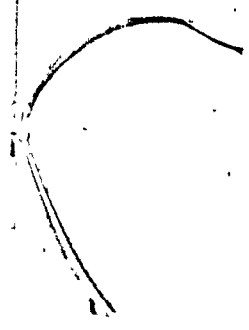
water, at times when
the existing escape
is too small to get
rid ^{with sufficient rapidity} ~~sufficiently~~
of the very
large supply which
the Lake occasionally
receives.

2. The Government
resolve therefore to ap-
prove of the estimate
for the sluice, and
with regard to the
provision of funds,
it is understood
that the Commis-
sioner of the Malabar

will be able to meet
 about half its cost
 out of reclamation
 money at this dis-
 posal; the balance
 required will be pro-
 vided under the head
 of miscellaneous pub-
 lic improvements
 as soon as possible
 after a report shall
 have been received
 of the exact sum
 to be thus contributed
 which will be as-
 certainable when

the foundations have
 been taken out to the
 depth which the
 nature of the soil
 may show to be re-
 quisite.

3 The construction
 of the wharf will be
 commenced at once,
 and convict labour
 should be utilized
 as far as possible
 so that the money
 outlay on this work
 may be reduced to
 a minimum.



$\frac{32}{5}$

3 75. Engr 7 on with plant & etc
 of the wharf
 5. Contd. Chas. Brown
 Sept 30/70

Encl.

ppd.

Proceedings of the Madras Govt.
Read the following:-

From the Asst Chief Engr { R. S. Datta 26/11/1915
for Irrigation }

Approved
N.
B.D.
Jas

The Government
observe that the Scheme,
for which an Estimate,
No. 3320, has been
submitted by the
Acting Chief Engineer
for Irrigation, is in
intimate connection
with the reclamation
scheme at the upper
part of the Lake,
which latter has been
deemed of great

importance to the
health of the Potomac
bazaar, and to the
convenience of the
inhabitants. The
upper part of the Lake
has silted up greatly
of late years from
the washings of the
bazaar and of the
hill in the neighbor-
hood; and in re-
claiming the swampy
ground, it is advisable
that the more shallow
parts of the water
spread to be maintained
should

I would like to see
"a moderate depth of
clear water up to the
edges of the lake."

It seems to me that a depth
of 4 or 5 ft. would be far
too great, especially near the
bazaar. The hill in
the middle of the lake is
I think if the actual depth
at the edge which might
be protected by a wall or
retention dam was
one foot or 18 inches
exactly, showing
3 ft. it would be quite
enough.

the actual depth at the edge,
which should be opposite the bazaar,
wherever softness stone may be
available, be retained, should be
a foot or eighteen inches exactly
shallowing to 3 feet

should be deepened,
and the aquatic plants
removed, so that there
may be ~~clear water~~
~~at least 5 feet of water~~
~~everywhere up to the~~
~~edge of the lake~~
(currents &c)
It is probable also that
in future years some
clearances will be
necessary ^(from time to time) near the
mouths of the flood
water, and drainage
channels, which dis-
charge into this part
of the Lake, and the
sluice will be of per-
manent utility for
regulating the water

level for this and
similar purposes,
as also for discharging
surplus water at times
when the existing weir
is too small to get rid
sufficiently rapidly
of the very large supply
which the Lake
occasionally receives.

2. The Government
resolve therefore to
sanction the Estimate
for the same, and
with regard to the
provision of funds,
it is understood that
the Commissioner of

the Vilgherries will
be able to meet about
half its cost, from
money realized by
the sale of materials
on land acquired for
the swamp reclama-
tion; this sum should
be placed by the
Commissioner at the
disposal of the Se-
cretary Engineer, and
the remaining amount
required will be pro-
vided as soon as
possible under the
head of Miscellaneous
Public Improvements.

3. The construction
of the sluice will be
commenced at once,
and convict labour
should be utilized as
far as possible so
that the money outlay
on this work may
be reduced to a
minimum.

W. 27/8/70

32
5-

To
The S. Engineer
Commr. of the
Reclamation
Works
Chief Eng. for Eng.

L No 3605

Further down page 2/11-2-76
From page 2/11-2-76
1375-10-5-11

L No. 2353W
29. 9. 70

No 3605

Govt. of 1870 Madras.

PUBLIC WORKS.

Chief Superintending Engrs
7th Division

Further this No. 29 of 11-2-71
Rev. 791-816.571
1390-20-8-71

29 Sept. 1853.

No. 573-574

Since the estimate of Rs.
3320 for a sluice in the
bank at the corner end
of the Ootacamund
lake, approved with
remarks.