

(1) Number of pages 40

(2) Date of repair 8-12-88

(3) Initials of the Referencer low ✓

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works DEPARTMENT

G.O. No.	3849 W	Press.
B.P. No.		Mis.
Dated	2-10-1878	197.

1-P
Not to be folded or roughly handled

3849
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

2nd October 1878, No. 3,849 W.

Buildings and Roads.

Military Works.

Read the following papers:—

No. 30. Proceedings of the Madras Government in the Military Department, dated 14th May 1878, No. 2,376.

From Brigadier-General H. O'CONNELL, Quartermaster-General, to the Secretary to Government, Military Department, dated Fort St. George, 25th February 1878, No. 1,355.

THE Commander-in-Chief having approved the estimates, &c., marginally noted, I am directed by

- I.—Specification for cementing soldiers' swimming-bath at Cannanore.
- II.—Estimate of probable expense (Rupees 910).
- III.—Abstract estimate.
- IV.—Letter, No. 740, dated 8th January 1878, from the Officer Commanding 48th Regiment.

It was anticipated by the Executive Engineer that lining with cement would be necessary. See Proceedings, Madras Government, Public Works Department, 4th April 1877, No. 1,133. It was hoped this expense might be avoided, but experience has shown that it is necessary.

His Excellency to submit them for the consideration and orders of Government.

2. If approved by Government, it is requested that the

papers may be forwarded to the Department Public Works for disposal.

From Brigadier-General H. O'CONNELL, Quartermaster-General, to the Secretary to Government, Military Department, dated Fort St. George, 3rd April 1878, No. 2,438.

FORWARDED to the Secretary to Government, Military Department, with reference to his No. 1,219, dated 11th March 1878.

From Colonel W. E. WHITE, Commanding Malabar and Canara, to the Quartermaster-General, dated Cannanore, 1st April 1878, No. 58.

I HAVE the honor, with reference to your memorandum, No. 1,876, of the 14th ultimo, to inform that Lieutenant Dobson, Assistant Engineer, gives his opinion on the subject in question as follows:—

"It was found when excavating the bath that the material at a lower level was very bad, and merely a kind of mud, which got trodden into a liquid state by the coolies' feet.

"To obviate this evil, a revised estimate was submitted to floor the bath with laterite blocks, as suggested by His Grace the Governor in Council in Proceedings of Madras Government, No. 824, of the 10th March 1877. This was carried out, and if the bath should be sunk 2 feet lower, as now suggested, it will be necessary to take up these laterite blocks already laid, when the same clayey soil will be again met with, and after sinking the 2 feet, it will be necessary to relay the laterite blocks as before, and this combined with the expense of excavating would cost nearly quite as much as cementing the bath."

Lieutenant Dobson does not at all apprehend that the cement lining will give way; being constantly wet, as it will be, there is little or no danger of fine cracks appearing, and the pressure of the water in the bath will neutralise any pressure there may be from external sources. He is moreover of opinion that, if great care is exercised when doing the work and the cement is kept constantly wet to prevent it setting too fast, there is little fear of cracks, and he does not consider it at all likely that any future repairs will be necessary to be made to the bath.

APPROVED generally, and transferred to the Public Works Department for consideration and final disposal.

(True Extract.)

(Signed) J. MICHAEL, Colonel,
Secretary to Government.

No. 30-A. From Lieutenant-Colonel R. B. KENNEDY, District Engineer, Malabar, to the Chief Engineer, Buildings and Roads, dated Calicut, 10th August 1878, No. 49.

With reference to memorandum No. 3,043, dated 10th July 1878, I have the honor to inform you that I waited till I had been to Cannanore before replying, and that having just returned from that station and conferred with Lieutenant Dobson, I consider that the concrete cement would be an improvement, though perhaps it might be dispensed with; the sides of the bath must be plastered as before proposed.

No. 30-B. From the same Officer, dated Calicut, 12th September 1878, No. 63.

With reference to your memorandum No. 3,854, dated 30th August last, I have the honor to forward a revised estimate, amounting to Rupees 1,160, for plastering with cement the swimming-bath for the European Regiment at Cannanore, also adding 4 inches of concrete cement plaster at the bottom of the bath.

No. 31. ORDER THEREON, 2nd October 1878, No. 3,849 W.

THE estimate of Rupees 1,160 for plastering with cement the swimming-bath of the European Infantry Regiment at Cannanore is sanctioned, and funds are appropriated from the Reserve under Military.

2. This sanction has been registered as Imperial No. 86 B of 1878-79.

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Govt., P.W.D.

(True Copy.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the District Engineer, Malabar.
" Examiner of Public Works Accounts.
" Military Department.

Exd. T. D. Ryan.
Spare Copies

BUILDINGS AND ROADS
MILITARY WORKS.

Govt. of [1878] Madras.

PUBLIC WORKS.

THE SECRETARY TO GOVERNMENT

MILITARY DEPARTMENT

From [illegible] to [illegible]

1. 20

2. 20

3. 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

4. 20

5. 20

6. 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

3869
3

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

14th May 1878, No. 2376.

Barracks and Buildings.

Read the following papers:—

No. 200. From Brigadier-General H. O'CONNELL, Quartermaster-General, to Colonel J. MICHAEL, C.S.I., Secretary to Government, Military Department; dated Fort St. George, 25th February 1878, No. 1355.

The Commander-in-Chief having approved the estimates, &c., marginally

- I.—Specification for cementing soldiers' swimming bath at Cannanore.
- II.—Estimate of probable expense (Rupees 910).
- III.—Abstract estimate.
- IV.—Letter, No. 740, dated 8th January 1878, from the Officer Commanding 48th Regiment.

It was anticipated by the Executive Engineer that lining with cement would be necessary. See Proceedings, Madras Government, Public Works Department, 4th April 1877, No. 1133. It was hoped this expense might be avoided, but experience has shown that it is necessary.

2. If approved by Government, it is requested that the papers may be forwarded to the Department Public Works for disposal.

No. 201. From Brigadier-General H. O'CONNELL, Quartermaster-General, to Colonel J. MICHAEL, C.S.I., Secretary to Government, Military Department; dated Fort St. George, 3rd April 1878, No. 2438.

Forwarded to the Secretary to Government, Military Department, with reference to his No. 1219, dated 11th March 1878.

From Colonel W. E. WHITE, Commanding Malabar and Canara, to the Quartermaster-General, Fort St. George; dated Cannanore, 1st April 1878, No. 58.

I have the honor, with reference to your memorandum, No. 1876, of the 14th ultimo, to inform that Lieutenant Dobson, Assistant Engineer, gives his opinion on the subject in question as follows:—

"It was found when excavating the bath that the material at a lower level was very bad, and merely a kind of mud, which got trodden into a liquid state by the coolies' feet.

To obviate this evil, a revised estimate was submitted to floor the bath with laterite blocks, as suggested by His Grace the Governor in Council in Proceedings of Madras Government, No. 824, of the 10th March 1877. This was carried out, and if the bath should be sunk 2 feet lower, as now suggested, it will be necessary to take up these laterite blocks already laid, when the same clayey soil will be again met with, and after sinking the 2 feet, it will be necessary to relay the laterite blocks as before, and this combined with the expense of excavating would cost nearly quite as much as cementing the bath."

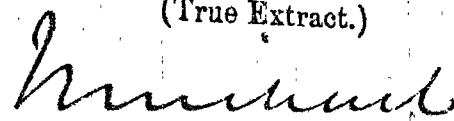
Lieutenant Dobson does not at all apprehend that the cement lining will give way; being constantly wet, as it will be, there is little or no danger of fine cracks appearing, and the pressure of the water in the bath will neutralize any pressure there may be from external sources. He is moreover of opinion that, if great care is exercised when doing the work and the cement is kept constantly wet to prevent it setting too fast, there is little fear of cracks, and he does not consider it at all likely that any future repairs will be necessary to be made to the bath.

No. 202.

ORDER THEREON, 14th May 1878, No. 2376.

Approved generally, and transferred to the Public Works Department for
consideration and final disposal.

(True Extract.)



Colonel,

Secretary to Government.

To the Public Works Department, with four enclosures. *and to S/Gen.*
„ Quartermaster-General.

G.O. No 11338/4 of 17/77
in the Public Works Department

1878 Dec 10

No. 6016

Recd 27 May

Dated May 14th

Encl.

G.O. No 1544 of 1878, No. 2578.

S.

MAY.

Nos. 200-202.

Approving the estimate for erecting soldiers' swimming bath at Cannanore.

Cell of 18781 Estimate.
MILITARY.
To THE PUBLIC WORKS DEPARTMENT,
Secy, Secy, Secy.

Enc 4.

Lo. No. 31-5-78

No. 19

Malabar Distt. Engrs. Office
Calicut 10 August 1878.

From

The District Engineer
Malabar.

To

The Chief Engineer
Roads and Buildings
Madras.

Sir,

With reference to Memo. No. 3048, dated 10 July 1878, I have the honor to inform you that I waited till I had been to Cannanore before replying, and that having just returned from that station, and conferred with Lt. Dobson, I consider that the concrete cement would be an improvement, though perhaps it might be dispensed with; the sides of the Bath must be plastered, as before proposed.

I have the honor to be
Sir

Your most Obedt. Servant.

W. D. Kennedy Lt. Col.

District Engineer, Malabar

C.E. N° 3043 d/10th July 1878

P.N. 1878 Dep^{ty}
Roads & Buildings

From N° 8932
The District Engineer
Malabar

N° 19.

Dated 10th August 1878.

Swimming Bath, Cannanore
Suggesting the use of Concrete
Cement

N° 63

Malabar Dist^{ct} Eng^g Office
Calicut 12th September 1878

From

3849
6

The District Engineer,
Malabar.

To

The Chief Engineer,
Roads and Buildings
Madras.

Sir,

With reference to your Memo
N° 3854 dated 30th August last, I have the
honor to forward a Revised Estimate
amounting to Rs. 1160, for plastering with
cement the Swimming Bath for the Euro-
pean Regiment at Cannanore, ^{also} by adding
4 inches of concrete cement plaster at the
bottom of the Bath.

I have the honor to be,

Sir,

Your most Obedt. servant.

M. W. Kennedy Lt. Col.
District Engineer, Malabar.

W. B.

Co. C. 12. 8. 78.
Gr. 12. 8. 78.

CE no 3854 of 30 Aug 78
no 3043 of 70 July
by Q no 1133 of 4 April
no 824 of 10 March

577 1878 AC

1038

Roads and Buildings

From

The District Engineer
Malabar

No 63

Dated 12 September 1878

Recd No

Enclosures 3.

Swimming Bath at Cannanore

Forwards Revised Estimate

for plastering with cement

the —

To Advy 26-9-78
Cir 27-9-78 Ptd 2.10.78

not water running over, come in at night

1878

Received
of Engineer

to account August 1878
H. Engineer Office, Marine

Estimated of the probable expense of constructing
the swimming bath. Indian Government
forwarded with reference to District Engineer's letter
of 19th date in the amount

to July 14-5-78
to August 28-5-78

to July 20-4-78
to 27-9-78

349

Specification for Cementing 48' Rect.
Swimming Bath
Amount of Estimate Rs. 1160

Reasons for
Work

The reasons for making the work necessary are explained in the Officer Commanding 48' Rect. letter which accompanies they are briefly thus:- The bath being cut out of the laterite Rock and floored with laterite and the stone being very porous, the sea water, when it comes in, only remains so long as either the tide is rising or at high water, and as the tide falls, the water in the bath percolates out of the bath at the same time so that at low water the bath is only about half full of water, in fact the water in the bath falls almost exactly as much as the tide rises or falls 3 feet or so. the result is that, as of course the tide is not always high in the day time or at times suitable for the men to bathe, that the bath cannot always be used. It is therefore considered that if the bath was cemented and made water tight the water having once come in at high

water at any time of the day or night would remain in and the bath would always be available. Hence this estimate.

The bottom of the bath will be first Concrete work covered with 4" good cement concrete made in the following way: - Good clean laterite gravel stones not larger than a pigeon's egg to be used. 5 parts gravel 1 part of sand & 1 part cement. The whole to be thoroughly mixed, dry at first, and then only put as much water as will make the materials bind. The whole to be well rammed and neatly finished off.

The sides of the inlet and outlet sluices are to be plastered with cement to protect them against the wearing influences of the sea which are strongly marked on the laterite all round. Plastering

The whole of the inside of the bath, step and concrete work at bottom, are to be plastered with Portland Cement. The cement will be gauged with 2 1/2 of sand and laid out to first 3/8" thick, and well and carefully rubbed. A fine coat of pure cement to bring up the thickness to 1/2" will be used, as a finish, is to be put on, and

Bricks

carefully rubbed smooth.

3849

Baling

It will be necessary to build a strong bund across the inlet sluice to keep the water out whilst the works go on, and this has been allowed for. Baling will also be necessary to keep the low end of bath dry, about 1/3 of the bath can be done without baling. All rubbish to be cleared away on completion of work.

Glennanor Dufferin
6th September 1898

A. Dobson L.R.E.
Civil Engineer
Malabar

Mr. B. K. K. K. K. K.
Civil Engineer, Malabar

[Handwritten signature]

62-100000-2-10-2

1/2

Hasting
 with Belmont & in opening Bath
 RS. 1

Ms. A.9.2.5

Total Finances

1950

Amount Due 1860-
1865

*Simple, Plain, Original, Word & Withdrawing. European Superiority Permanent —
Abstract of the Probable Expense of Plastering with Cement the Swimming
Baths European Best at Cambridge*

[illegible]

STATION *Cambridge* *W. Mass.* *Wm. W. Keeney* *Private: local.*
DATE *10 January 1878* *Wm. W. Keeney* *Elect. Engineer, & laborer.*

James Oliver D. P. W.

Abstract Estimate of the
probable expense of the
bathing with cement at
the swimming Bath. Engr.
West of Cambridge

Reason for
this

3849
13
Specification for Cementing
48 Regt. Swimming Bath.
— " — Estimate Rs 910 —

The reasons for making this work
necessary, are explained in the Officer
Comdr. 48 Regt. letter, copy of which
accompanies, they are briefly thus —
The bath being cut out of the Late-
rite Rock, and floored with laterite, and
the stone being very porous the sea water
when it comes in only remains in so
long as either the tide is rising or, at
high water, and, as the tide falls the
water in the bath percolates out of the
bath, at the same time so that at
low water the bath is only about 1/2
full in fact, the water in the bath
falls almost exactly as much as the
tide, viz from 3 feet or so. the result is
that, as of course, the tide is not always
high in the day time or, at times, un-
able for the men to bathe, that the bath
cannot always be used. It is therefore
considered that if the bath was cemented
and made water tight, the water having
once come in at high water, at any
time of the day or night, would
remain in and the bath would

always be available. hence the estimate.

Plastering.— The side of the inlet and outlet sluices are to be plastered with Cement to protect them against the wearing influence of the sea, which are strongly marked on the latents all round.

The whole of the inside of the bath, steps and all, are to be plastered with Portland Cement. The Cement will be gauged with 2 of sand, and laid on to just $\frac{3}{4}$ " thick, and well & carefully rubbed. A fine coat of pure Cement to bring up the thickness to $\frac{1}{2}$ " will be used, as a finish will be put on, and carefully rubbed smooth.

Bunds.— It will be necessary to build a strong bund across the inlet sluice to keep the water out whilst the work is going on and this has been allowed for.

Baling.— Baling will also be necessary to keep the lower end of bath dry. about $\frac{1}{2}$ of the bath can be done without baling.

All rubbish to be cleared away on completion of work.

Commanding Officer } A. F. Dobson Lt. R.E.
16th January 1878 } Asst. Engineer Malabar

Malabar District Engineer's Office }
Calcutta 15th January 1878 }
M. H. Keene } Asst. Engineer, Malabar

N. 440

Cannanore
8th Jan'y 1878

From Officer Commanding
28th Regiment

3849
15

To The Dy. Asst. Q. M. General
Malabar & Canara

Sir,
I have the honor to request that the
D. P. W. may be asked to put some kind of
plaster or stone to the sides and flooring
of the bath in the use of the regiment under
my command. The bath acts fairly well
when the tide is high, and the sea roughed
from the sea breeze, but as the tide goes down and
the wind drops, the water apparently percolates
through the laterite, thus often leaving the
bath with very little water in it.

As the tide does not always suit for
day bathing, I think that if some kind of
water tight flooring was put in, that the
bath once filling either by day or night, the
water could be kept in, and then the men
could always bathe.

From the damp appearance of the
sides

Sides of the bath, I should say that the water therein rises high some time every 24 hours, but as the time of high water happens sometimes to be in the night, the water disappears before morning.

I may mention, that when the bath was handed over to me some little time ago after the repairs lately executed, the tide happened to suit for day bathing, and the bath was nearly full for some time. At the present time the hour for high water has shifted, and the bath has had little water in it during the day time. I have therefore the honor to request that some steps may be taken to have the bath made water-tight, so as to suit at all times for bathing.

I have the honor to be,

Your Obedt. Servant

Wm. H. Keppel
Commandant 8th Regiment.

1151/1077

8-1-78. By order of 229/1978.

282 01:744

By Asst 2nd General's Office No. 6
Barrackpore, 9th January 1878

No. 27

Forwarded to the Assistant Engineer, Malabar
with a request that an estimate may be
prepared, & to be returned -

(By Order)

W. R. S. Major
for Asst 2nd General's Office.

100

3849
18

Stem - European
 growing with *Artemisia* etc.

by Act of the Genl. Co. 27 of 9th January 1778

Plastering with Cement the Swimming Bath. European Pat.

13 January 1878 }

Christall: Kohl!
Herrn: Lechner, Melcher,

Respectfully,
D. P. W.

Adm. dt. 22.

Order No. 344

1878-79

1878-79

Estimate of the probable
expense of plastering with
Cement the Swimming
Bath European Regt at
Cannanore.

2nd Oct 14-8-78

PROCEEDINGS OF THE MADRAS GOVERNMENT.

No 3849

134 R
clerk works.
Public Works Department.

UNDER date the 2 Oct 78. 3849/19
Read the following:—

Pro: Military Depastt (H.C. No 2376 of 14th May 78)
From the D.E. Malabar - " " 49 " 10th Sept 78
do do " " 68 " 13th Sept 78

The estimate of
Rupees 1160 for plastering
with Cement the Swims-
ming bath of the
European Infantry
Regiment at Cannanore
is sanctioned, and
funds are appropriated
from the Revenue
under Military.

1878/9

This sanction has been
registered as Special
Order P.W. No 10 of 1878/79 -
D.E. Malabar
Mil: Depastt
21-10-78

10310
651622
87912
Govt. of (1878) Madras.
PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O. 2nd Oct 1878, No. 38294

Nos. 30-31

Swimming bath, European.
Infantry Barracks Cantonment.
The estimate for flooring
the floor of the — with
cement sandstone —

Submitted.

6-5