

(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.

1059 (W)

Press

Mis.

Dated

27.4.

1876.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
27th April 1876.*

No. 405. Read the following letter from Major ROSS THOMPSON, R.E.,
Officiating Consulting Architect to Government, to Major-General G. W.
WALKER, R.E., Secretary to Government, Public Works Department,
dated Chepauk, 3rd April 1873, No. 414:—

I HAVE the honor to submit a plan and estimate, amounting to Rupees 19,027,
for constructing a retaining wall along the
tank adjacent to the Senate House now
under construction.

One Plan.
One Detailed Estimate.
One Abstract do.

2. The following is an extract from
a memorandum, dated 7th May 1875, given to me by Mr. Chisholm when handing over
charge of his office.

"It would be a good thing if money can be obtained to run a retaining wall
along the east side of the adjacent tank. I spoke to the Honorable W. Robinson, now
His Excellency, on the subject, and he quite approved of the measure. Although
nothing serious, there has been a settlement in the north end of the building where
the foundations are very deep. The settlement occurred after the very heavy rain of
1873. Since that date I carried on this part very slowly until lately, when, as far
as I could judge, the maximum had been reached or near about it. I think there
can be no doubt that the water of this tank passed off by the northern part of the
building under the foundations and caused some movement a long way down. The
whole is founded on sand, but this sand of course rests on the usual black mud."

3. The estimate includes a dwarf wall, and railing to be constructed over the
retaining wall, this protection will be necessary when the roads round the Senate
House are laid out. The railing will be of the same pattern as that adopted on the
south side of the tank.

4. I submit this plan and estimate, more in deference to Mr. Chisholm's opinion,
as above expressed, than from any conviction of my own that the work is necessary.
There has been no further apparent settlement in the building, and my belief is that
there will not be any.

No. 704.

MEMORANDUM.

No. 405-A.

CONSIDERING that the settlement stated to have occurred is dated from 1873;
that it is spoken of as nothing serious; that the Consulting Architect took no precau-
tions on account of it up to his departure in May 1875, though all that time he had
been raising the superstructure of unusual height; that the Officiating Consulting
Architect considers the work unnecessary and disbelieves in any further settlement
occurring, the Chief Engineer cannot recommend that so costly a work shall be
undertaken.

2. If any precautions against the passing of the water of the tank under the
foundations of the northern part of the building were thought by the Consulting
Architect necessary, to be taken, the matter should have been brought forward by
him with illustrative sections of the ground, showing the levels of the strata of sand
and black mud on which the building is stated to be founded. Without such details

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the

READ the following:—

Proceedings of the Madras Government, Public Works Department,
27th April 1876.

it is impossible to say how high the protective wall should be raised above the bottom of the tank, and how deep its foundations should be carried.

OOTACAMUND, (Signed) G. W. WALKER, Major-General, R.E.,
20th April 1876. Chief Engineer, Public Works Department.

No. 406. ORDER THEREON, 27th April 1876, No. 1,059.

CIVIL WORKS, No. 27.

UNDER the opinion recorded by the
Chief Engineer, His Grace the Governor
in Council does not consider the proposed
work necessary.

(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To the Officiating Consulting Architect to Government,
Educational Department.

From
The Offg. Chief Architect } (H.C. No. 414 of 3rd April 1876)
to Government

Considering the length
of time that has elapsed
since the alleged slight
settlement occurred; and
that no farther appearance
of settlement has been
observed; His Grace the
Governor in Council is not
of opinion that there is any
pressing necessity for carry-
ing out any protective work;
at least on such an expensive
scale.

C.M.W.

Offg. Architect
Ed. Sept.

X¹ attch

Proceedings of the
Madras Government
under date

Read the following
(M.O. No 414 dated 3 April)
(No 704 dated 20 April 1916)
His Grace the Governor
in Council is not disposed
to ~~sanction the opinion~~
~~expressed by the Chief~~
~~Engineer, to consider~~
the proposed work
necessary - C.M.V.

Where the opinion is
expressed by the Chief
Engineer that for
in Council does not
consider the proposed
work necessary.

From Cms. Architect to
Chief Engineer
under the opinion would
by the Chief Engineer

Cms. Architect to Govt.
Educational Dept -

This is to be
on the part of the
Memo in the
proposed work
of the Chief Engineer
it is not necessary
order of the
in work necessary

3/4/16

Sent to Bd-12-4-76
Cir 6-4-76

Provincial
Special

New Works
92

Abstract.

Estimate for constructing a Retaining wall along the side of the Tank adjacent to the Senate House Madras.

Quantity	Item	Rate	Per Amount	Total
140	Brick wells 3 ft diameter & 16 ft deep with wooden curb Complete	42 . . each	6020 . .	
23	do do 6 ft deep do	17 4 . .	396 2 .	
1385	by concrete filling	3 12 9 by	5258 10 9	
678	Brickwork in chunam with thick field bricks	5 . . .	3390 . .	
7997	Filling in space between wall and margin of Tank with sea-sand	. 3 . .	14997 .	
2724	Forming sloped bank with earth taken from the Tank	. 5 . .	851 4 .	
	Contingencies at 5 percent		870 10 3	18256 12 .

Dwarf wall and Iron Railing

35	by Brickwork in chunam with thick field bricks	5 . . by	9 11	
	Plastering 3 coats	4 5 6 by	13 11	
1	by Substone standard Complete	4 . . each	4 . .	
1	by Ornamental Casting over standard Complete	3 . . .	3 . .	
1720	by Iron rod 1 1/2 diameter including fixing up Complete	. 1 6 lb	4 6 10	
	Contingencies		1 1 4	

Cost for a length of off 14 . .

Cost for 423 ft Rupees 740 4 .

Total Rupees 19027 . .

Comm. Archt's Office
Chennai 3rd April 1876

Sub

W. P. M. S. P.
Major R. E.
Offr Comm. Archt. to Government

Comm
Sent to Govt 12-4-76

N. 2458/76.
3/76.

Provincial
Special

New Works.

Retaining wall along the Tank
adjacent to Senate House.

Abstract

Estimate..... Rs 19,027.0.0

Consulting Architects Office
3rd April 1876

Provincial
Special

New Works

Abstract

Quantity	Item	Rate Per	Amount	Total
140	Brick wells 3 ft diameter & 15 ft deep with wooden Curb Complete	48 .. each	6720 ..	
23	do do 6 ft deep do	17 4 ..	396 12 ..	
1385	Concrete filling	3 12 9 67	5258 10 9	
678	Brickwork in chunam with thick field bricks	5	3390 ..	
7997	Filling in space between wall and margin of Tank with sea sand	3	14997 ..	
2724	Turning sloped bank with earth taken from the Tank contingencies at 5 percent	5	861 4 ..	
			870 10 3	18256 12 ..

Dwarf wall and Iron Railing

3 1/2	6 ft Brickwork in chunam with thick field bricks	5 by	9 11
1/8	Plastering 3 coats	4 5 6 922	13 11
1	1/2" cut stone standard complete	4 each	4 ..
1	Ornamental casting over standard complete	3	3 ..
47.20	lbs Iron rod 1 1/2" diameter including fixing up complete	1 6 lbs	4 6 11
	Contingencies		1 1 4

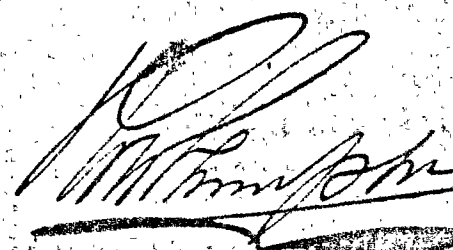
Cost for a length of 8 ft 11" 14 ..

Cost for 423 feet Ropes 740 4 ..

Total Rupees 19,027 ..

Cons. Archts Office
Chepauk. 3rd April 1876

Sub

 Major R.E.

Offs Cons. Archts to Govt.

Estimate for constructing a Retaining wall
along the side of Tank adjacent to the Senate
House Madras.

General Specification

Brick wells The wall will be founded on brick wells, 3 ft
internal diameter, 6 and 15 feet deep.

Concrete The interior of the wells and interstices will
be filled with concrete.

Brickwork A brick flatform 12" deep to the full breadth
of the wells will be laid, over which the retaining
wall will be built to an average thickness of
2' 9" and 13' 3" high, with a batter on the Tank
side, a little more than a sixth of the vertical
height.

Filling in The space between the wall and margin of
the Tank will be filled in with sea-sand.

Forming bank A bank will be formed with a slope of 2 to 1,
on the Tank side against the retaining wall,
of earth taken from the Tank.

Dwarf wall. A dwarf wall will be built over the
retaining wall, surmounted by a simple iron
railing with cut stone standards at intervals of
8 ft, in all respects like the existing railing on
the south side of the Tank.



Major R.E.

Offg. Comd. Archt. to Govt.

Estimate for constructing a Retaining wall along the side of Tank adjacent to the Senate House Madras.

General Specification

Brick wells The wall will be founded on brick wells, 3 ft internal diameter, 6 and 15 feet deep.

Concrete The interior of the wells and interstices will be filled with Concrete.

Brickwork A brick platform 12" deep to the full breadth of the wells will be laid, over which the retaining wall will be built to an average thickness of 2' 9" and 13' 3" high, with a batter on the Tank side, a little more than a sixth of the vertical height.

Filling in The space between the wall and margin of the Tank will be filled in with Sea-sand.

Forming bank A bank will be formed with a slope of 2 to 1, on the Tank side against the retaining wall, of earth taken from the Tank.

Dwarf wall. A dwarf wall will be built over the retaining wall, surmounted by a simple iron railing with cut stone standards at intervals of 8 ft, in all respects like the existing railing on the south side of the Tank.

W. H. P. S.

Major R.E.
Offg. Comd. Archt. to Govt.

Filling in

Space between Retaining wall and margin of Tank

1	88	0 36	6 12	6	10150
1	52	0 18	3 5	6	5220
1	139	0 38	7 12	6	17514
1	139	0 24	8 5	6	51945
1	139	1 36	10 11	6	19397
1	139	0 25	4 5	6	9114
1	139	0 34	2 6	6	1602
1	13	0 21	0 5	6	

Cubic ft. 215925

Cubic yds. 7997

Forming bank along the retaining wall with earth taken from the Tank

1	505	6 57	10 11	6	2724
---	-----	------	-------	---	------

Cubic yds. 2724

Dwarf wall and Railing for a length of 8 ft.

1	8	0 0	10 0	6	33
---	---	-----	------	---	----

8 ft

Plastering 3 coats.

1	8	0 0	2 6	20	Sq
---	---	-----	-----	----	----

Squares 20

Cut stone standard

1	in	Number	
---	----	--------	--

Ornamental Casting over standards

1	in	Number	
---	----	--------	--

Iron rod 1 1/2" diameter

1	8	0 0	5 90	4720	lbs
---	---	-----	------	------	-----

Detailed Quantities

Description of work	No	Length	Breadth	Depth	Contents	Total
Brick wells 3 feet internal diameter and 15 feet deep	140				in Number	

Brick wells 3 feet internal diam and 6 feet deep	23				in Number	
--	----	--	--	--	-----------	--

Concrete for filling interior of wells and interstices	1	345.09	0.15	0	16.575	
do	1	58.09	0.6	0	3132	
Deduct						49.707

Well rings	140	11	0.0	6.15	0	11,550
do	23	11	0.0	6.6	0	1,759
Total						12,309

Cubic ft						37,398
Cubic yds						1,385

Brickwork in Churnam						
----------------------	--	--	--	--	--	--

Plat form over wells	1	403.09	0.01	0	3.627	
Retaining wall	1	403.09	2.913	0	11,684	
Total						15,311

Cubic yards						
--------------------	--	--	--	--	--	--

Provincial
Special

New works.

Retaining wall along the Tank
adjacent to Senate House.

Estimate. Rupees 19,027.0.0

Consulting Architects Office
3rd April 1876

CONSULTING ARCHITECT'S OFFICE,

Chopank, 3rd April 1876.

ARCHITECT TO GOVERNMENT.

Government P.W.D.

the honor to submit a Plan and
amounting to Rupees 19,027.0.0 for
a retaining wall along the Tank
the Senate House now under

wing is an extract from a Memorandum
1875 given to me by Mr. Chisholm
in charge of his Office.
It is a good thing if money can be
run a retaining wall along the Tank
adjacent Tank. I spoke to the
Robinson now His Excellency
and he quite approved of the
Although nothing serious, there has
ment in the north end of the
here the foundations are very deep.
It occurred after the very heavy rain
that date I carried on this part
until lately when as far as I could
maximum had been reached

Detailed guide

Description of work.

Brickwells 3 feet internal diameter and 15 feet deep

Prick wells 3 feet internal dia
and 6 feet deep.

concrete for filling interior

of wells and interstices.

Product

well rings

Brickwork in Chunan

Plat form over wells
Retaining wall

CONSULTING ARCHITECT'S OFFICE,

CONSULTING ENGINEER
Chepauk, 3^d April 1876

From

THE CONSULTING ARCHITECT TO GOVERNMENT.

To

THE *Secretary to Government P. W. D.*

SIR,

I have the honor to submit a Plan and Estimate amounting to Paper 19,027 - 0.00 for constructing a retaining wall along the Tank adjacent to the Senate House now under construction.

The following is an extract from a Memorandum dated 7th May 1875 given to me by Mr. Birchall when handing over charge of his Office.

"It would be a good thing if we
"obtained to run a retaining wall along the east
"side of the adjacent bank. I spoke to the
"Honorable W. Robinson and His Excellency
"on the subject and he quite approved of the
"measure. Although nothing serious, there has
"been a settlement in the north end of the
"building where the foundations are very deep.
"The settlement occurred after the very heavy rain
"of 1875. Since that date I carried on this part
"very slowly until lately when as far as I could
"judge the maximum had been reached."

"or near about it. I think there can be no
doubt that the water of this Tank passed
off by the northern part of the building
under the foundations and caused some
involvement a long way down. The whole
is founded on sand, but this sand of
course rests on the usual black mud."

This Estimate includes a dwarf wall,
and railing to be constructed over the retaining
wall; this protection will be necessary when
the roads round the Senate House are
laid out. The railing will be of the same
pattern as that adopted on the south side
of the Tank.

I submit this Plan and Estimate,
more in deference to Mr. Birchholm's opinion,
as above expressed, than from any conviction
of my own, that the work is necessary.
There has been no further apparent
settlement in the building, and my
belief is that there will not be any.

I have the honor to be,

Your most Obedt Servt

Wm. P. Thompson
Major R.E.
Offg. Cong. Architect Genl.

Inc

Feb 2/81 2v-3

2:18 AM
Arch. and Eng. Co.
Thompson

Depot of
Thompson
2:18 AM
Arch. and Eng. Co.
Thompson
E.E.

Arch. and Eng. Co.
Thompson
2:18 AM
Arch. and Eng. Co.
Thompson

W. 1876 Sept.

No. 414

No. 2458

From

The Offg. Cons. Architect
to Government.

To

The Secretary to
Government P.W.D.

C. Inger's No. 704. of 20-4-76.

Dated 3^d April 1876
Received 4th —

E. J.

2-6-76

* 1 Plan and Estimate

Submits Plan & Estimate
for a Retaining wall along
the Tank adjacent to the
Senate House.

No. 405

Cir. 20-4-76 - Dtd 27-4-76
Sent to ^{Commr} 12-4-76 R. 29-4-76.
Cir 6-4-76

No 704
Memorandum

Considering that the settlement
stated to have occurred is dated from 1873,
that it is spoken of as nothing serious,
that the Consulting Architect took no
precautions on account of it up to his
departure in May 1875, though all that
time he had been raising the super-
structure of immense height, that the
Officiating Consulting Architect considers
the work unnecessary and disbelieves in
any further settlement occurring; the
Chief Engineer cannot recommend that so
costly a work shall be undertaken.

2. If any precautions against the
passing of the water of the tank under
the foundations of the northern part of
the building were thought by the Con-
sulting Architect necessary to be taken,
the matter should have been brought
forward by him with illustrative

lectures

sections of the ground, showing the
 levels of the strata of sand and black
 mud on which the building is stated
 to be founded. Without such details
 it is impossible to say how high the
 masonry walls should be raised above
 the bottom of the tank, and how
 deep its foundations should be carried.
 Major General R. L.
 Chief Engineer R. L.
 20 April 1876
 N. 405 A

P. W. D. 291

N. 1059

Proceedings of the Madras Government,
 Under date the 27th April 1876.

Read the following:—

From
 The Comr. Architect to Govt. (N. 405 A of 3rd April 1876)
 Chief Eng^r Memorandum. (N. 1059 of 20th April 1876)

Under the opinion
 recorded by the Chief
 Engineer His Grace the
 Governor, in Council does
 not consider the proposed
 work necessary.

27/3

3 Off. Comr. Architect to Govt.
 Educational Dept.
 Desd 1059

№ 405-406

2458

Govt. of [★]Madras.
PUBLIC WORKS.

To

Dated

Issued

Recd

G. O.

1876, No.

1159

No. 1159 - 1159

Retaining Wall along the
Tank adjacent to the Senate
House - Presidency St

The construction of
a considered
unnecessary.

N. 405-406