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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W DEPARTMENT

G.O. No.	2521 W	Press.
B.P. No.		Mis.
Dated	15.10.1881	19 ~~8~~ .

1507.

Not to be folded or roughly handled

2521

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

15th October 1881, No. 2521 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 54. From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 5th October 1881, No. 49 W.

I HAVE the honor to submit the following report of the progress on these works during September.

2. NORTH PIER SUPERSTRUCTURE.—There were twenty-one blocks set in the north pier head during the past month, and on the completion of these there remains no more to be done until the titan is turned round and considerably altered for constructing the horn or wing-wall. Preparations were made in the latter part of September for this, but as there is no chance of being able to finish the horn before November, I have reluctantly been obliged to defer turning and altering the titan until the storm season is passed. To be attacked by a north-east gale with the titan half way along the horn would be a most hazardous state of affairs, and I think that it is desirable to run no unnecessary risks when the pier is on the eve of completion. The present termination is admirably adapted to resist a heavy sea, and the titan will be in as secure a place as can be provided.

3. NORTH PIER RUBBLE BASE.—As a precautionary measure I continue to deposit a small quantity of rubble round the end of the pier so as to have a good foreshore from the foot of the blocks. During September 844 tons of stone were used for this purpose.

4. QUARRIES.—One train of laterite was received from Ambatūr during September for the beach work, and from Pallāvaram one train was run daily bringing a total of 3,686 tons of stone during the month. It is probable that stone will be required from Pallāvaram after the harbour piers are finished for the protective works to the north, the railway lines therefore are kept in proper order and repair.

5. SOUTH PIER SUPERSTRUCTURE.—The superstructure of the south pier was completed, so far as the question of length is concerned, in September, but the pier head has to be widened and the horn has to be built as at the north pier. In the past month 152 blocks were set, advancing the pier by a length of 68 feet. The distance between the two pier heads now is a little less than 550 feet.

6. SOUTH PIER RUBBLE BASE.—A small quantity of stone was required for levelling up the foundations of the blocks at the end of the pier, but boats were not kept continuously at this work. In the month 129 tons of stone were deposited.

7. PROTECTIVE WORKS NORTH OF HARBOUR.—The encroachment of the sea to the north is once more most serious, and I shall have occasion to address Government separately on this subject with reference to the complaint of Mr. W. C. Van Derwart, regarding his house. I am extending the revetment as rapidly as I can to the north, but its effect is not by any means satisfactory. It certainly protects the shore on which it stands, but it has the effect of driving the sea on before it in such a way as to aggravate the evil it is intended to remedy. I am pushing the work as rapidly as I can and have deposited in September 1,564 tons of stone in the work. Much of this stone is taken from the surf bank of the south pier. The special plan accompanying this report shows the position and direction of the revetment in red colour, and also shows encroachment of the sea to the north.

8. STORES RECEIVED ON WORKS.—I am glad to report that the steamer *Booldana* arrived during September with shackles for the mooring buoys, which were much needed. The remainder of the mooring gear will probably arrive in the current month.

9. MOORINGS.—I regret to state that in screwing down the moorings for the first large buoy, the screwing tube broke and thereby caused much delay. The tube is being repaired on the works, but during its repairs operations have been unavoidably suspended. There are now five shallow water moorings put down and two screws of one of the large buoys are fixed. These last two screws are driven down to the full depth of 20 feet into the ground.

10. BEACH IMPROVEMENT WORKS.—The rubble stone work of the two jetties on the beach has been proceeded with, 1,638 tons of granite having been used for the purpose. The slopes of the newly formed beach have also been pitched with laterite. At the south jetty six piles have been driven, but none of the wrought iron screw piles are yet fixed. On this subject I have already addressed Government separately.

11. EXPENDITURE.—The expenditure during September has been approximately Rs. 51,165, and the total outlay up to date has been Rs. 57,68,990.

12. PLANS, SURVEYS, &c.—I forward with this report a lithographed plan of the harbour, showing the result of the most recent survey taken at the beginning of last month. The fathom contour lines of 1879 are shown in red lines, and those of 1881 in black dotted lines. It will be seen that nowhere is there any undoubted silting up, except near the corner of the south pier, which I believe to be partly due to sand that has come through the south pier. The five-fathom contour line is nearer in shore than two years ago, and although in the south half of the harbour the two-fathom line has slightly receded, it is very conspicuous that on the north half it has come in nearly 150 feet. These soundings have been taken with the greatest care and accuracy and the figures are reduced to depths below mean sea level. The line of coast to the north is shown on a separate and larger plan. The longitudinal sections are as usual.

No. 55. ORDER THEREON, 15th October 1881, No. 2521 W.

Recorded.

2. The result of the soundings is considered satisfactory.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
" Master Attendant.
" Marine Department.

Exd. S. T. Austin.

Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1881) Madras.
PUBLIC WORKS.

To

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

&c., &c., &c.

Dated October, 15th.

Issued

Road.

Encl.

G. O., 15th October 1881, No. 2521 W.

OCTOBER.

Nos. 54-55.

Madras Harbour Works.—Progress Report
for September 1881, recorded.

No. 49 W.

From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

To

Colonel R. H. Sankley, C.B., R.E.
Secretary to Government, P.W.D.
Buildings & Roads
Madras, 5 October 1881

Sir,

I have the honor to submit the
following report of the progress on these
works during September.

North Pier
Superstructure

2. There were 20 blocks set in the
North Pier Head during the past month,
and on the completion of these there re-
mains no more to be done until the
Titan is turned round and considerably
altered for constructing the horn or
wing wall. Preparations were
made in the latter part of September
for this but as there is no chance
of being able to finish the horn before
November I have reluctantly been
obliged to defer turning and altering
the

the Titan until the storm season is passed. To be attacked by a North East gale with the Titan half way along the horn would be a most hazardous state of affairs, and I think that it is desirable to run no unnecessary risks when the pier is on the eve of completion. The present termination is admirably adapted to resist a heavy sea, and the Titan will be in as secure a place as can be provided.

3. As a precautionary measure North Pier
I continue to deposit a small quantity Rubble Base
of rubble round the end of the pier so as to have a good foreshore from the foot of the blocks. During September 84.4 tons of stone were used for this purpose.

4. One train of laterite was received Quarries
from Ambathoor during September for the Beach work, and from Pallavaram one train was run daily bringing a total of 3686 tons of stone during the month. It is probable that stone
will

172 22/8
will be required from Pallavaram after the Harbour piers are finished for the protective works to the North, the railway lines therefore are kept in proper order and repair.

South Pier
Superstructure

5. The superstructure of the South Pier was completed, so far as the question of length is concerned, in September but the pier head has to be widened and the horn has to be built as at the North Pier. In the past month 152 blocks were set advancing the pier by a length of 68 feet. The distance between the two pier heads now is a little less than 550 feet.

South Pier
Rubble Base

6. A small quantity of stone was required for levelling up the foundations of the blocks at the end of the pier, but boats were not kept continuously at this work. In the month 129 tons of stone were deposited.

Protective works
North of Harbour

The encroachment of the sea
to

to the North is once more most serious
and I shall have occasion to address
Government separately on this subject
with reference to the complaint of Mr.
W. C. Van Derwart regarding his house.

I am extending the revetment as ra-
pidly as I can to the North, but its
effect is not by any means satisfac-
tory. It certainly protects the shore
on which it stands, but it has the
effect of driving the sea on before
it in such a way as to aggravate
the evil it is intended to remedy.

I am pushing the work as rapidly
as I can and have deposited in Septem-
ber 1864 tons of stone in the work.

Much of this stone is taken from the
Surf bank of the South Pier. The
special plan accompanying this re-
port shows the position and direction
of the revetment in red color, and
also shows the encroachment of the
Sea

Stores received
on Works.

8. I am glad to report that the Steamer
'Booldana' arrived during September
with Shackles for the mooring buoys,
which were much needed. The remainder
of the mooring gear will probably arrive
in the current month.

Moorings

9. I regret to state that in screwing
down the moorings for the first large
buoy, the screwing tube broke and
thereby caused much delay. The tube is
being repaired on the works, but during
its repairs, operations have been unavoid-
ably suspended. - There are now 5 shallow
water moorings put down, and two screws
of one of the large buoys are fixed. These
last two screws are driven down to the
full depth of 20 feet into the ground.

Beach Improv-
ment Works.

10. The rubble stone work of the two
jetties on the beach has been proceeded
with, 1638 tons of granite having been
used for the purpose. The slopes of the
newly

newly formed beach have also been pitched with laterite. At the South jetty six piles have been driven, but none of the wrought iron screw piles are yet fixed.

On this subject I have already addressed Government separately.

11. The expenditure during September Expenditure has been approximately Rs 51,165, and the total outlay up to date has been Rs 57,68,990.-

12. I forward with this report a Plans, Survey lithographed plan of the Harbour showing the result of the most recent survey taken at the beginning of last month. The fathom contour lines of 1879 are shown in red lines, and those of 1881 in black dotted lines. It will be seen that no where is there any undoubted silting up, except near the corner of the South Pier which I believe to be partly due to sand that

174 28/10
that has come through the South Pier. The 5 fathom contour line is nearer in shore than 2 years ago, and although in the South half of the Harbour the 2 fathom line has slightly receded it is very conspicuous that on the North half it has come in nearly 150 feet. These soundings have been taken with the greatest care and accuracy and the figures are reduced to depths below Mean Sea Level. - The line of coast to the North is shown on a separate and larger plan. The longitudinal sections are as usual. -

I have the honor to be,

Sir,
Your most Obedt Servt

J. H. Flower, ¹⁰
Superintendent,
Madras Harbour Works

Q.6. No 22 86 W 27 16.9.81

Buildings & Roads

From
The Superintendent
Madras Harbour Works

No 49 W
Dated 5th October 1881
Depd. 6th

No. of enclosures 4

1. One long
plan of the
harbour

Progress Report
Submitted - for September 1881.

AL.S.
10.

Corr. 10.10.81 At. 13.10.81.

Q.7. 10.81 At. 13.10.81. 2. 13.10.81.

X
enc

No 2521 W

PS B+R
Clocks
2/4

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 15th October 1881.

Read the following:—

From the Supt. M. H. Works H.S. No 49 W 25 October 1881.

1. The result of the
soundings is
satisfactory.

1. Recorded
S
10/10/81

Supt. M. H. Works ✓
Marine Department ✓

2. The result of the
soundings is considered
satisfactory

Depd
27-10-81

11/10/81

Oct 7

Am. 10.10.8. St. 13.10.8.

6.7.10.81 Ap. 10.8. 2.10.10.8.

[Handwritten signature]
[Handwritten signature]

C.N. 5739.

Gt. of 1881 Madras.

PUBLIC WORKS.

To

15/10

Dated

Issued

Recd.

Encl.

G. O. *15th Oct* 1881, No. 2521 W

Nos. 51, 55-

Madras Harbour Works.

*Progress Report for September
1881, recorded.*

Entered in Receipt Regr.