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(3) Initials of the Referencer cms

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. DEPARTMENT

G.O. No.	721-W	Press.
B.P. No.		Mis.
Dated	12.2.1878	197

Not to be folded or roughly handled

721
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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

12th February 1878, No. 721 W.

Buildings and Roads.

Civil Works.

Read the following paper:—

No. 102, From F. N. THOROWGOOD, Esq., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads Branch, dated Madras, 1st February 1878, No. 72 W.

I HAVE the honor to submit the following report of the progress on these works during the month of January 1878.

2. *North Pier Works.*—The weather during January was much more favorable for work than had been the case for some months, and block-setting was carried on on 18 days. During these days 90 blocks of 27 tons weight were set, and the break-water was thereby advanced 79 lineal feet. The total length of block-work on the north pier is now 435 feet from the point B.

3. The block-work has now assumed a more regular and even appearance, and the correct batter or slope has been recovered.

4. There is still a slight quantity of sand found on the rubble base, but this is easily removed, and each block is now bedded on rubble of laterite and other stone, the bottom of the blocks being well protected by large laterite boulders as the work advances. The work of depositing these boulders has to be carried on late at night so as to interfere as little as possible with the diving and block-setting work.

5. *Rubble Base.*—The rubble base of laterite for carrying the superstructure blocks is chiefly being tipped from masula boats and catamarans, but the top surface is levelled up with granite chips thrown in from the pier itself. During January 3,300 tons of laterite have been deposited by boats and catamarans, but I hope in a week's time to have completed arrangements for carrying out this part of the work much more expeditiously.

6. *Block-making.*—On January the 9th block-making by machinery was resumed, and since that date 109 of the 27-ton blocks have been made, 68 on the south platform, and 41 on the north. More blocks would have been made if the stone supply had been larger, but a little difficulty and delay is unavoidable in first arranging for the block-making stone coming from the South Indian Railway and being transferred from the narrow to the broad gauge wagons.

7. I have considered with reference to block-making whether it would be desirable to carry the narrow gauge line along the beach and up the block-ground, but I am of opinion that the complication at points and crossings with a mixed gauge would be so much against such a course that it would cancel the advantage gained by doing away with the transfer of the stone from one wagon to another.

8. *Supply of Stone from Quarries.*—The quarries at Ambatoor and Chinnamapett have both been worked during January, but not to any large extent. From Ambatoor 2,030 tons of laterite have been received, and from Chinnamapett 160 tons of shingle for block-making.

9. After discussing the matter with the Harbour Committee, it has been agreed at some future date to discontinue the supply of stone from Chinnamapett, but some months will be occupied in clearing out the stone already collected by the contractors.

10. *South Pier Works.*—The work of setting blocks has been pushed on at the south pier as quickly as possible, and during the month 80 blocks of 27-ton weight have been satisfactorily set. These have advanced the pier a length of $98\frac{1}{4}$ lineal feet, and the total length of block-work from the point E where the block-work commences is now $173\frac{3}{4}$ feet. As at the north pier the blocks are well protected with foreshore of large boulders as the work advances.

11. A greater advance would have been made at the south pier during January if the supply of stone for rubble base had been larger. An increased supply and increased power of disposing of it will be in force during February.

12. *Stone supply to South Pier.*—All the stone for the south pier has been brought down by the South Indian Railway, and the total amount during the month from the 15th mile quarry and from Palaveram is about 3,800 tons. The whole of this has been deposited in the base and foreshores of the pier. If the Railway Company had more wagons at their disposal they could send down a greater number of wagons per diem, and the work would progress more rapidly.

13. *General.*—Longitudinal and cross sections of the sea bottom have been taken several times during the month, and the most recent longitudinal ones are shown on the tracings accompanying this report. I hope next week to get some more sections on the lines used by the Marine Surveyors. On the 24th and 25th January the crates and tanks were visited. Three of the crates could not be found although they were carefully looked for. It is probable that they have been either carried away by ships' cables or have fallen to pieces. The fourth crate in $6\frac{1}{2}$ fathoms had sunk a little more into the sand, but there was no accumulation apparent on any side, the sand being level all round it.

14. The tank in $4\frac{1}{2}$ fathoms had three inches more of sand inside it than in October last, and it had sunk a few inches further into the sandy bottom, but there was no appearance of accumulation on any side.

15. *Expenditure.*—The total expenditure up to date is about Rupees 15,38,303, but this may be subject to a slight alteration when the details are gone into and all adjustments made.

16. *Plans and Sections.*—Accompanying this report I have the honor to send one general plan of the harbour, and two longitudinal elevations with recent soundings of the north and south piers.

No. 103. ORDER THEREON, 12th February 1878, No. 721 W.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government, P.W.D.

To the Superintendent, Madras Harbour Works.
„ Marine Department.

Exd. C. Howarth.
Spare Copies.

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of (1878) Madras.
PUBLIC WORKS.

THE SUPERINTENDENT, MADRAS
HARBOUR WORKS,
&c., &c., &c.

Dated February 12th.

Issued

Recd.

Encl.

G. O., 12th February 1878, No. 721 W.

FEBRUARY.

Nos. 102-103.

Madras Harbour Works.—Progress Report
of the 1st for January 1878, recorded.

No. 72 W

From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

To

Colonel C. A. Ford, R. E.

Secretary to Government, P.W. Dept.
Buildings & Roads Branch.
MADRAS, 1st February 1878.

SIR,

I have the honor to submit the following report of the progress on these works during the month of January 1878.—

- North Pier Works
2. The weather during January was much more favourable for work than had been the case for some months and blocksetting was carried on on 18 days.— During these days 90 blocks of 27 tons weight were set, and the breakwater was thereby advanced 79 lineal feet. The total length of blockwork on the North pier is now 435 feet from the point B.
 3. The blockwork has now assumed a more regular and even appearance, and the correct batter or slope has been recovered.
 4. There is still a slight quantity of sand found on the rubble base, but this is easily removed and each block is now bedded on

on rubble of laterite and other stone, the bottom of the blocks being well protected by large laterite boulders as the work advances. The work of depositing these boulders has to be carried on late at night so as to interfere as little as possible with the diving and block setting work.

5. The rubble base of laterite for carrying the superstructure blocks is chiefly being tipped from masula boats and catamarans, but the top surface is levelled up with granite chips thrown in from the pier itself. During January 3300 tons of laterite have been deposited by boats and catamarans, but I hope in a week's time to have completed arrangements for carrying out this part of the work much more expeditiously.

Rubble Base

6. On January the 9th blockmaking big machinery was resumed, and since that date 109 of the 27 ton blocks have been made, 68 on the South platform and 41 on the North. More blocks would have been made if the stone supply had been larger, but a little difficulty and delay is unavoidable in first arranging for the

Blockmaking

12 1/4
blockmaking stone coming from the South Indian Railway and being transferred from the narrow to the broad gauge wagons.

7. I have considered with reference to blockmaking whether it would be desirable to carry the narrow gauge line along the beach and up the block ground, but I am of opinion that the complication at points and crossings with a mixed gauge would be so much against such a course that it would cancel the advantage gained by doing away with the transfer of the stone from one wagon to another.

Supply of stone from quarries

8. The quarries at Ambatoor and Chinnamapett have both been worked during January, but not to any large extent. From Ambatoor 2030 tons of laterite have been received, and from Chinnamapett 160 tons of shingle for blockmaking.

9. After discussing the matter with the Harbour Committee, it has been agreed at some future date to discontinue the supply of stone from Chinnamapett, but

some

some months will be occupied in clearing out the stone already collected by the contractors.

10. The work of setting blocks has been pushed on at the South pier as quickly as possible, and during the month 80 blocks of 27 tons weight have been satisfactorily set. These have advanced the pier a length of $98\frac{1}{2}$ lineal feet, and the total length of blockwork from the point B where the blockwork commences is now $173\frac{1}{2}$ feet. - As at the North pier, the blocks are well protected with foreshore of large boulders as the work advances.

11. A greater advance would have been made at the South pier during January if the supply of stone for rubble base had been larger. An increased supply and increased power of disposing of it will be in force during February.

12. All the stone for the South pier has been brought down by the South Indian Railway and the total amount during the

South Pier works

General

Stone supply to
South Pier

$12\frac{1}{2}$
the month from the 15th mile quarry and from Palaveram is about 3800 tons. The whole of this has been deposited in the base and foreshores of the pier. If the railway company had more wagons at their disposal, they could send down a greater number of wagons per diem, and the work would progress more rapidly.

13. Longitudinal and cross sections of the sea bottom have been taken several times during the month, and the most recent longitudinal ones are shown on the tracings accompanying this report. I hope next week to get some more sections on the lines used by the Marine Surveyors. On the 24th and 25th January the crates and tank were visited. Three of the crates could not be found although they were carefully looked for. It is probable that they have been either carried away by ships cables or have fallen to pieces. - The fourth crate in $6\frac{1}{2}$ fathoms had sunk a little more into the sand, but there was no accumulation apparent on any side, the sand being level

level all round it.

114. The tank in $14\frac{1}{2}$ fathoms had three inches more of sand inside it than in October last; and it had sunk a few inches further into the sandy bottom, but there was no appearance of accumulation on any side.

15. The total expenditure up to date is Expenditure
about Rs 15,38,363. but this may be
subject to a slight alteration when the details
are gone into and all adjustments made.

16. Accompanying this report I have the honor to send one general plan of the Harbour, and two longitudinal elevations with recent soundings of the North and South piers. —

Have the honor to be

Ch

Your most Obedient Servant

J. N. Thorogood.

Superintendent

Madras Harbour Works

$$\frac{721}{6}$$

Went

100-443886-100

The 11th of
 January 1861
 Dear Sir
 I have the honor
 to acknowledge the
 receipt of your letter
 of the 10th inst.
 and in reply to inform
 you that the same
 has been forwarded
 to the proper
 authorities for their
 consideration.
 I am, Sir, very
 respectfully,
 Yours,
 J. H. [Signature]

11/27/77

100-131
Buildings & Roads

From
The Superintendent
Madras Harbour Works

N. 72 W
Dated 1st February 1878.

Enclosures 3

Progress of work
Submits report of progress
of the works during the
month of January 1878. -

ca 5.2.78. R11-2-78

P. W. DEPARTMENT.

72¹/₇

Read the following:-

Letter from the Superintendent, Madras Harbour
Works, No 72 W dated 1st Feb 1878.

FOR ORDERS.

G. A. Smith Col RB
Secy to Govt P.W.D.

I am very sorry to hear of the accident to
the general body of the ship. It is
very regrettable that this is the case. The
apparent "sinking" of the tank is a
very serious matter. - N. 72 W

5th Feb 78.

W. G. R.

FOR ORDERS.

No. 721 Waf 12th Feb 18

Recorded
9/17/12

Supt. M. H. Hark 4
Meine Dept. 7
Office - 37

1548
Cp *1548* *13-2*
of 1878 *13-2*
PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O. *12 Feb* 1878, No. *721W*

Nos.

Madras Harbour Works
Progress report of the
for January 1878. Recorded