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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. D. DEPARTMENT

G.O. No.	<u>2472</u>	Press.
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Dated

12.6.1878

197

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2472

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

12th June 1878, No. 2,472 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 103. From F. N. THOROWGOOD, Esq., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads Branch, dated Madras, 1st June 1878, No. 10 W.

I have the honor to submit the following report of these works for the month of May 1878.

2. NORTH PIER.—In the monthly report for April 1878, Mr. Beardmore stated that the work of setting blocks had been suspended for a time on account of the wetness of the blocks on hand. I regret to state that delay from the same cause existed in the early part of May, and when all was ready for a resumption of work the weather prevented any diving operations from being carried on.

3. On the 31st May the divers having prepared the bed for one course, eight blocks were satisfactorily laid, bringing the length of concrete block work now to a distance of $704\frac{1}{4}$ feet from the point marked B.

4. The past delay in the progress of the works is extremely annoying, but I think I may with confidence predict that in future nothing but unfavorable weather shall prevent the work from advancing, although I fear that during the south-west monsoon the progress will not be so rapid as during the north-east.

5. I am now in correspondence with Mr. Parkes on the subject of the age of concrete blocks, as he is of opinion that they might be set in the work rather sooner than has hitherto been the case. But I must state that the reason for keeping them longer than five weeks before laying them has been simply a matter of caution.

6. At present everything is ready for a rapid advance of the work, and with the extended block grounds and new stone crushers (from England) it is hardly possible that another stoppage for want of blocks will occur. The block ground now is capable of holding as many blocks at one time as was reckoned upon by Mr. Parkes when he framed his estimate of the time for completing the harbour, and before the present stock is cleared out I shall have heard from him finally as to whether he still considers that blocks of one month old may safely be set in the lower courses of the piers.

7. RUBBLE BASE.—When the weather has permitted, the work of tipping rubble base from boats has been carried on as formerly, and 1,452 tons of laterite have been disposed of in this manner. This work is still going on, but I hope it will shortly be superseded by the steam hoppers on their return from Cocanada. There is now a considerable length of rubble base in advance of the work, so that no delay need be anticipated on that account. No deposit of sand has yet been discovered by the divers.

8. BLOCK-MAKING.—On the 11th May the block grounds were filled quite full (the total number of blocks on stock being 1,035); the work of making blocks was

therefore suspended. Between May 1st and 11th, 92 blocks were made, of which 8 were prepared by hand labor, and 84 by the usual steam machinery.

9. QUARRIES.—The supply of stone from the quarries has been sufficient for the works, but has not been pushed to any great extent. From Ambathoor 150 tons of laterite stone and ballast have been received, most of which has been deposited in the rubble base together with stone from the "false" start.

10. From the quarries on the South Indian Railway 5,546 tons of stone of various sorts has been delivered. This has been used for block-making and for rubble base, foreshore, &c.

11. SOUTH PIER.—The state of the weather has been such as to prevent any blocks from being set at the south pier during May, but everything is in readiness for taking advantage of the first day of smooth water, the blocks for the next course being in waiting at the south pier; 1,593 tons of stone have been deposited in the base and foreshores.

12. DRAINS.—The work of diverting the drain near the south pier is being proceeded with briskly, and 12-inch pipes have been procured from the Municipality for carrying the diversion through the surf bank. This will serve to keep the area between the piers free from any great accumulation of sewage until a complete intercepting sewer can be constructed.

13. STORES.—During the month of May the steamers *Deccan*, *Columbian*, *Almera*, and *Mirzapore* brought stores from England, the principal being diving dresses and apparatus, 20 stone-crusher jaws, a cement-testing machine, and some steel wire rope.

14. The prospect of having shortly to work the two hopper barges and to keep them supplied with fuel led me to lay in a large stock of coal which will last nearly one year. The last large supply was obtained through the Public Works Stores at Rupees 27 per ton, and the present stock (600 tons) was delivered on the works for Rupees 25 per ton by coal merchants. The coal is of very good quality, but is not suitable for smiths' work as I had hoped it would be from the analysis submitted to me. On the 23rd May a portion of this coal took fire from spontaneous combustion, but by working vigorously night and day the fire was kept under, and a very little coal was damaged.

15. GENERAL MORGAN'S CEMENT.—The cement made by General Morgan has been used freely in block-making, and the concrete made with it appears up to the present time to be equal to that made with the same proportion of English Portland cement. I would, therefore, propose that another 2,000 tons be procured for these works at 10 per cent. lower cost than the English cement. It will be necessary to procure more cement from England, and I intend to submit an indent for a further supply, but not for the whole estimated quantity required. The cost of the English cement including all charges for landing, storing, &c., and allowing for what is damaged in the act of landing by boats, amounts to about Rupees 46 to Rupees 47 per ton, the lowest price being Rupees 45-13-0 per ton in 1875-76. If 10 per cent. be taken off these prices the rate would be Rupees 42 or 43 per ton. On this subject, however, I wish to address Government separately as it is a matter of much importance.

16. EXPENDITURE.—The amount expended on the works up to date exclusive of some charges for "materials at site" which are not yet wholly adjusted is Rupees 18,05,579.

17. PLANS AND SECTIONS.—Accompanying this report I have the honor to submit a plan of the harbour showing the alteration in the high water contour line, and two sections in advance of the north and south piers.

18. GENERAL.—I regret to state that my staff is suffering greatly from sickness, and that both the Accountant and Storekeeper are consequently absent from duty. Mr. J. Chicken, the Foreman Mechanic from England, is also unable to be on the works, and is in the hands of the Surgeon of the district suffering severely from fever.

No. 104.

ORDER THEREON, 12th June 1878, No. 2,472 W.

HIS GRACE the Governor in Council notices with satisfaction the cessation of sand deposit, as well as the progress made in block-making.

2. The Superintendent will submit a further report at an early date on the proposed intercepting sewer. Its cost and the probable time of completion should be stated.

(True Extract.)

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

(True Copy.)

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

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

Edw. C. Howarth.
Syare Copies

83
BUILDINGS AND PUBLIC WORKS
GOVT. OF (1878) MADRAS
PUBLIC WORKS.

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

Dated June 12th

Issued

Recd.

G. O., 12th June 1878, No. 103-101

JUNE

Nos. 103-101.

MADRAS HARBOUR WORKS - I have ordered
on the Public Works Report of the 1st
May 1878.

No. 1017

From

THE SUPERINTENDENT.

MADRAS HARBOUR WORKS.

To

Colonel E. A. Ford R.E.

Secretary to Government P. W. Dept.
Buildings & Roads Branch
Fort St. George, Madras.

MADRAS.

1st June 1878.

Sir,

I have the honor to submit the
following report of these works for the month
of May 1878.

North Pier.

2. In the monthly report for April 1878,
Mr. Bardonmore stated that the work of
setting blocks had been suspended for a
time on account of the narrowness of the blocks
in hand. I regret to state that delay from
the same cause existed in the early part of
May, and when all was ready for a re-
sumption of work the weather prevented
any diving operations from being carried
on.

3. On the 31st May, the divers having
prepared the bed for one course of blocks
were satisfactorily laid, bringing the length
of

of concrete block work now to a distance of 70 1/4 feet from the point marked B.

4. The past delay in the progress of the works is extremely annoying, but I think I may with confidence predict that in future nothing but unfavourable weather shall prevent the work from advancing, although I fear that during the South-west monsoon the progress will not be so rapid as during the North East.

5. I am now in correspondence with Mr. Parkes on the subject of the age of concrete blocks, as he is of opinion that they might be set in the work rather sooner than has hitherto been the case. But I must state that the reason for keeping them longer than five weeks before laying them has been simply a matter of caution.

6. At present every thing is ready for a rapid advance of the work, and with the extended block grounds and new stone crushers (from England) it is hardly possible that another stoppage for want of blocks will occur. The block ground

now

Rubble Base

now is capable of holding as many blocks at one time as was reckoned upon by Mr. Parkes when he framed his estimate of the time for completing the Harbour, and before the present stock is cleared out I shall have heard from him finally as to whether he still considers that blocks of 1 month old may safely be set in the lower courses of the piers.

7. When the weather has permitted, the work of tipping rubble base from boats has been carried on as formerly, and 1452 tons of laterite have been disposed of in this manner. This work is still going on, but I hope it will shortly be superseded by the steam hoppers on their return from Coconada. There is now a considerable length of rubble base in advance of the work so that no delay need be anticipated on that account. No deposit of sand has yet been discovered by the divers.

Block making

8. On the 11th May the block grounds were filled quite full (the total number of blocks in stock being 1035) the work of making

making blocks was therefore suspended. Between May 1st and 11th 92 blocks were made of which 8 were prepared by hand labour and 84 by the usual steam machinery.

9. The supply of stone from the quarries has been sufficient for the work but has not been pushed to any great extent. From Ambalham 950 tons of laterite stone and ballast have been received most of which has been deposited in the rubble base together with stone from the "false" start.

10. From the quarries on the South Indian Railway 5546 tons of stone of various sorts have been delivered. This has been used for blockmaking and for rubble base for shore &c.

11. The state of the weather has been such as to prevent any blocks from being set at the South pier during a long time, but everything is in readiness for taking advantage of the first day of smooth water the blocks for the next course being, in waiting at the South pier. 15472 tons of stone have been deposited in the base & for shore &c.

Quarries

Quarries

12. The work of diverting the drain near the South pier is being prosecuted with briskly, and 12 inch pipes have been procured from the Municipality for carrying the diversion through the surf bank. This will serve to keep the area between the piers free from any great accumulation of sewage until a complete intercepting sewer can be constructed.

Stores

13. During the month of May, the steamers "Eccan," "Columbian," "Amora" and "Alizapora" brought stores from England. The principal being, diving flasks and apparatus, 20 stone crusher jaws, a cement testing machine and some steel wire rope.

14. The prospect of having shortly to work the two Hopper Barges and to keep them supplied with fuel led me to lay in a large stock of coal, which will last nearly one year. The last large supply was obtained through the Public Works Stores at Rs 27 per ton, and the present stock (100 tons) was

South Pier

was delivered on the works for \$25 per ton by coal merchants. The coal is of very good quality, but is not suitable for smith's work as I had hoped it would be from the analysis submitted to me. On the 23rd May a portion of this coal took fire from spontaneous combustion but by working vigorously night and day the fire was kept under and a very little coal was damaged.

15. The cement made by General Morgan has been used freely in block making and the concrete made with it appears up to the present time to be equal to that made with the same proportion of English Portland Cement. I would therefore propose that another 2000 tons be procured for these works at ten per cent lower cost than the English cement. It will be necessary to procure more cement from England and I intend to submit an indent for a further supply, but not for the whole estimated quantity required. The cost of the English cement including all charges for landing, storage, &c. and allowing

General Morgan
Cement

Expenditure

Plans and
Sections

General

allowing for what is damaged. The cost of landing by boats amounts to about \$1.50 per ton, the lowest price being \$1.25 per ton in 1854. If 10 per cent be taken off these prices the rate would be \$1.42 or \$1.50 per ton. On this subject however I wish to address Government separately as it is a matter of much importance.

16. The amount expended on the works up to date exclusive of some charges for "Materials at site" which are not yet wholly adjusted is \$1805,579.

17. Accompanying this report I have the honour to submit a plan of the Harbour showing the location in the High Water Centre line, and two Sections in advance of the North and South piers.

18. I regret to state that my Staff is suffering greatly from sickness and that both the Accountant and Store-keeper are consequently absent from duty. Mr. J. L. Johnson, the foreman mechanic

mechanic from England is also unable
to be on the works and is in the hands
of the Surgeon of the District suffering
severely from fever.

I have the honor to be,

Sir,

Your most Obedient Servant

J. H. Thompson

Superintendent

Matthes Harbor, North

2472
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7

90 to 2197 w 2/17 May/78
Memo - 738 - 12 4/26/78

1878 Sept

Buildings & Roads
From No. 6289
The Superintendent,
Madras Harbour Works

PUBLIC WORKS DEPARTMENT.

From the Superintendent, Madras
Harbour Works, to Mr. J. H. D.,
Jan 1878.

FOR ORDERS.

12.10.18
Gated 17 June 1878
Recd. 4
Enclosures 3

Attn: Mr. J. H. D.
Secy. Government
P. H. D.

Progress of works
Submitted Report on progress of
works during May 1878.

To Actg Secy - 6-78

Cir 6.4.78 Ptd 12.5.78

The assertion that
report is satisfactory.
The progress
has been made.

A very short & poor
months report
O.T.B.

I think it is a very
poor report. It is
very short & poor.

FOR ORDERS.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

ORDER date the

Read the following:—

From

The Supt. Madras Harbour
Works

(No. 10 W d 1st June 1898)

His Grace the
Governor in Council notices
with satisfaction the copation
of sand deposit, as well as
the progress made in block
making.

The Superintendent
will submit a further report
at an early date on the pro-
posed intercepting sewer.
Its cost and the probable
time of completion should be
stated.

Supt. Madras H. Works
Residing Dept.

10/10

17-6-98

to 20th 4-6-98

Cir. 66-8. Ptd. 2698

1289



PUBLIC WORKS

Supt. Harbor Works

must be kept in mind

12 June 1874

Dec. 11 1874

Harbor Works

Passing under the
proper report of the
the May 1874

Ind. 1874