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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. DEPARTMENT

G.O. No. 1659-A-W
B.P. No. 1659-A-W

Press.
Mis.

Dated

15-7-1885

198

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from F. N. THOROWGOOD, Esq., M. Inst., C.E.,
Superintendent, Madras Harbour Works, to the Secretary to Government,
Public Works Department, dated Madras, 3rd July 1885, No. 19 W. :—

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

2. *North pier works—Rubble base.*—The sea has been very troublesome during the greater part of the month, and has interfered most seriously with diving operations, with deposit of rubble, and with surveying work in setting out the new lines for working. The foreshore (to be covered hereafter with 30-ton blocks) was reported complete last month, and the only addition to it during June has been about 140 tons of rubble excavated by the divers from the harbour side of the pier and merely thrown to the sea side to be out of the way.

3. The preparation of the new rubble foundation has been proceeded with as well as circumstances would permit, and 774 tons of rubble from Pallavaram were accurately deposited. This amount together with broken pieces of blocks blasted by dynamite make a total of 1,460 tons of good material now in position for the commencement of the new work, and as the old rubble base has been properly levelled by divers, there is already provision for nearly 200 feet of foundation for the new superstructure.

4. *No advance in recovering old blocks.*—I am sorry to report that I have been unable to experiment yet on the recovery of old blocks by means of a floating crane, partly on account of almost incessant swell and partly on account of sickness on the staff.

5. *Setting out new work.*—The setting out of the line for the new work has hitherto given much trouble owing to the broken water caused by the proximity of the old and fallen walls. The system that I am adopting is more laborious than that usually used in deep sea works, where buoys are generally anchored to mark certain spots. In this particular work I propose to mark the curve with specially framed iron beacons, the positions of which will be accurately determined with theodolite and measuring line, and which will be fixed in their places by divers. I hope to have the first of these beacons fixed in three days' time, and if this arrangement proves successful, a more rapid deposit of rubble and clearing away of old blocks may be reckoned upon.

6. *South pier works—Rubble base.*—At the south pier the state of the sea interfered much with marine operations, but to a less extent than at the north. During June 7,153 tons of rubble were tipped in the new base, making a total of 13,046 deposited altogether. As mentioned with respect to the north pier, when the beacons marking the new centre line are accurately fixed (a feat demanding a quiet sea) work will make more rapid progress.

7. *Pallavaram quarries.*—On many days trains from the quarries had to be cancelled owing to roughness of sea and consequent inability to dispose of stone. As

it is impossible to foretell beforehand the state of weather and sea for the following day, it often became necessary to cancel trains by telegraph at very short notice, which, no doubt, must be awkward for the traffic department of the South Indian Railway. That Company has been so obliging as to allow the harbour works staff at Madras and Pallavaram the free use of their telegraph wires for this purpose, and has otherwise been most accommodating.

8. From the 15th June, excepting when stopped by bad weather, four trains ran daily from Pallavaram bringing down 12,187 tons of stone. Of this quantity 4,402 tons were clean granite chips for making concrete and the remainder was for rubble base.

9. With reference to the working of the Pallavaram quarries, I cannot help, with all deference, expressing my regret that I have failed to show (G.O., No. 1478 W., of 24th June 1885) the want of some change in the magisterial arrangements with regard to run-away coolies. I feel sure that I have not pointed out the existing evil sufficiently clearly, and I beg to be permitted to address Government once more on the subject, as at present the coolies desert to an extent that is most hurtful to progress, and in spite of the utmost efforts of the contractor to summon them before a magistrate, and chiefly because the Sarishtadar of Saidapet is not always available, being on tour.

10. *Concrete block-making.*—The block-making machinery has been working well up to the 25th of June, when, through a slight misunderstanding with the Madras Cement Works, it had to be stopped for four days; the misunderstanding being that, without giving the Cement Works sufficient warning, I had ordered rather more cement than they could supply. There is, however, plenty of English cement in store, and block-making was, after four days, resumed with this material, my reason for not using it at once being that, as it all came direct from the factory to Madras *via* canal, it was likely to require four or five weeks' exposure to mature it.

11. During June 176 concrete blocks for the new work were turned out, making now a total of 259. Of these blocks 166 are for the "wave-breakers," and 93 are for the superstructure of the two piers.

12. *Tools and plant, &c.*—Two new moulds for making concrete blocks have been completed, and a covered wagon made for conveying blasting materials to the ends of the piers. Several repairs were executed upon the locomotive engines and cranes, and all machinery was kept in good order. The railway lines have been kept in as good order as the worn-out state of the rails will allow. A new boat-shed for the harbour works boats has been completed, and a small new store-shed for ropes, pulley-blocks, &c., has been taken in hand.

13. *Stores received on works.*—Some much-needed stores have been received during June, of which the following are the most important:—a boiler for a steam crane, which will enable me to move some of the old concrete blocks and re-build another block platform; a large consignment of 50-lb. and 75-lb. rails and fishplates, which are most seriously needed, the present lines being very unsafe; besides these, turpentine, boat oars, emery cloth, iron chain, &c., have arrived.

14. *Staff of office and on works.*—The death of Mr. Beardmore, on the 2nd June, already reported and commented on, with regret, in G.O., No. 1385, of 13th June, need only be noted here as a marked event during the month. On 7th June Mr. Beardmore's principal clerk (whose illness I drew attention to in paragraph 18 of my last report), Mr. E. A. D'Vaz, died of heat apoplexy. As he had charge of all Mr. Beardmore's papers in the office, referring to cement testing, boundaries of properties, drainage works, &c., his death was not only most distressing but added greatly to the difficulties of carrying on office work. Mr. Underdown, foreman diver, reported sick in paragraph 2 of my last report, is quite recovered; but most unfortunately, Mr. G. Gunther, foreman engineer, and Mr. J. Lowe, supervisor of block-making, have both been completely disabled, by injuries received on the works, since 13th June. They are now able to walk, and are on a fair road to complete recovery; but it is needless to say how disconcerting all these disasters have been just when all possible energy is needed. I beg to be allowed to record that but for the great energy of Mr. G. Lowe, head foreman, and for the able and willing assistance of

Mr. Dumphy, our lately appointed Sub-Engineer, the deficiency on the staff would have been sadly felt.

15. In conclusion I have to state that I trust the arrival of Mr. A. L. Pogson is now not far distant; for, without wishing to magnify my labors in the least, I would, with much deference, draw attention to the fact that from 26th April I have had no assistant whatever, and I begin to find I cannot do justice to the two-fold duties, especially at this time of year.

ORDER—dated 15th July 1885, No. $\frac{1659}{A}$ W., Public Works.

Taking into consideration the difficulties which have been encountered, arising from the state of the weather and from sickness among the staff, the Right Honorable the Governor in Council considers the progress made on the Madras harbour works during June to be satisfactory.

2. The Government are well aware of the large amount of work that has unavoidably fallen on the Superintendent during the past two months. The sanction of the Government of India to the appointment of Mr. A. L. Pogson as Assistant Superintendent is daily expected.

3. Paragraph 9 of Mr. Thorowgood's letter will be communicated to the Judicial Department for consideration, with advertence to G.O., dated 9th June 1885, No. 1522.

4. Paragraph 7 will be communicated to the Consulting Engineer for Railways.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.

" Consulting Engineer for Railways.
" Examiner, Public Works Accounts.
" Judicial Department.
" Marine "

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of 1885 Madras.

PUBLIC WORKS.

Dated July, 16th.

Recd.

Encl.

G.O., 15th July 1885, No. 1659 W.
A

JULY.

Madras Harbour Works

Orders on progress report of — for
June 1885.

No. 1911

FROM

THE SUPERINTENDENT,

MADRAS HARBOUR WORKS,

TO

The Hon. Col. J. H. Shaw-Stewart, R.E.
Secretary to Government,
Public Works Department,
Fort Saint George
MADRAS, 3rd July 1885.

Sir,

I have the honour to submit the following report of the progress on these works during the month of June.

North Pier Works
Rubble Base

2. The sea has been very troublesome during the greater part of the month, and has interfered most seriously with diving operations, with deposit of rubble and with surveying work in settling out the moorings for working. The Fore-shore (to be covered hereafter with 30 ton blocks) was reported complete last month, and the only addition to it, during June has been about 100 tons of rubble excavated by the divers from the Harbour side of the pier and merely thrown to the Sea side to be out of the way.

3. The preparation of the new rubble foundation has been proceeded with as well as circumstances would permit, and 774 tons of rubble from Pallavaram were accurately deposited. This amount together with broken pieces of blocks blasted by dynamite make a total of 1460 tons of good material.

communicated from Mr. J. H. Shaw-Stewart

material now in position for the commencement of the new work, and as the old rubble base has been properly levelled by divers, there is already provision for nearly 500 feet of foundation for the new superstructure.

11. I am sorry to report that I have been unable to experiment yet on the recovery of old blocks by means of a floating crane, partly on account of a furious incessant swell and partly on account of sickness on the staff.

No advance
in recovering
old blocks

5. The setting out of the line for the new work has hitherto given much trouble, owing to the broken water caused by the proximity of the old and fallen walls. The system that I am adopting is more laborious than that usually used in deep sea work, where buoys are generally anchored to mark certain spots. In this particular work I propose to mark the curve with specially framed iron beacons the positions of which will be accurately determined with theodolite and measuring line, and which will be fixed in their places by divers. I hope to have the first of these beacons fixed in three days time, and if this arrangement proves successful a more rapid deposit of rubble and clearing away of old blocks may be reckoned upon.

Setting out
new work

6. At the South Pier the state of the sea interfered much with marine operations, but to a less extent than at the North. During June 1153 tons of rubble were tipped in the new base making a total of 3,016 deposited altogether.

South Pier work
Rubble Base

As mentioned with respect to the North Pier when the beacons marking the new centre line are accurately fixed (a feat demanding a quiet sea) work will make more rapid progress.

Pallavaram
Quarries

7. On many days trains from the quarries had to be cancelled owing to roughness of sea and consequent inability to dispose of stone. As it is impossible to foretell beforehand the state of weather and sea for the following day, it often became necessary to cancel trains by telegraph at very short notice, which no doubt must be awkward for the Traffic Department of the South Indian Railway. That Company has been so obliging as to allow the Harbour Works Staff at Madras and Pallavaram the free use of their telegraph wires for this purpose, and has otherwise been most accommodating.

8. From the 15th June, excepting when stopped by bad weather, four trains ran daily from Pallavaram bringing down 12,187 tons of stone. Of this quantity 4402 tons was clean granite chips for making concrete and the remainder was for rubble base.

9. With reference to the working of the Pallavaram Quarries I cannot help, with all deference, expressing my regret that I have failed to save (G.C. 1478) of June 24, 1885) the want of some

Change

+ With C 5864 S-4. M-4-7-85 -

change in the magisterial arrangements
with regard to run-away coolies. I feel
sure that I have not pointed out the existing
evil sufficiently clearly and I beg to be per-
mitted to address Government once more on
the subject as at present the coolies desert to
me extent that is most hurtful to progress
and in spite of the utmost efforts of the Con-
tractor to summon them before a magistrate,
and chiefly because the Sarishtadar of Seida
pet is not always available, being on tour.
10. The block making machinery has been Concrete
working well up to the 25th of June when through Block making
a slight misunderstanding with the Allahabad
Cement Works it had to be stopped for 14 days;
the misunderstanding being that without giving
the Cement Works a sufficient warning I had
ordered rather more cement than they could
supply. There is however plenty of English
Cement in Store and block making was, after
4 days, resumed with this material, my reason
for not using it at once being that as it all
came direct from the factory to Allahabad via
Cawnpore it was likely to require four or five
weeks exposure to mature it.

11. During June 176 Concrete blocks for the
new work were turned out, making now a total
of 254. Of these blocks 166 are for the "Wave
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blocks have been completed, and a covered
wagon made for conveying blasting materials
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and all machinery was kept in good order.
The railway lines have been kept in as
good order as the worn-out state of the rails
will allow. A new boat shed for the Harbours
Works boats has been completed, and a
small new Store shed for ropes, pulley blocks
&c. has been taken in hand.

Stores received
in Works

13. Some much needed stores have been re-
ceived during June, of which the following
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signment of 50 lb and 75 lb rails and fish-
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present line being very unsafe. Besides
these turpentine, boat oars, emery cloth, iron
chain

Chair &c have arrived.

Staff of office
and on Works

14. The death of a Mr. Beardmore on the 2^d June already reported and commented on with regret in C. C. C. 1885 of June 18th need only be noted here as a marked event during the month. On June 7th Mr. Beardmore's principal clerk (whose illness I draw attention to in para 15 of my last report) Mr. E. A. Star, died of heart apoplexy. As he had charge of all Mr. Beardmore's papers in the office, referring to cement testing, boundaries of properties, drainage works &c his death was not only most distressing but added greatly to the difficulties of carrying on office work. Mr. Underdown Foreman driver reported sick in paragraph two of my last report as quite recovered, but most unfortunately Mr. G. Gunther Foreman Engineer, and Mr. J. Lowe, Supervisor of Blockmaking have both been completely disabled by injuries received on the works, since June 13th.

at Hay

15. They are now able to walk and are on a fair road to complete recovery, but it is needless to say how disconcerting all these disasters have been just when all possible energy is needed. I beg to be allowed, to record that but for the great energy of Mr. G. Lowe, Head Foreman, and for the able and willing assistance of Mr. Drumphy, our lately appointed Sub-Engineer, the deficiency on the Staff would have been sadly felt.

15. In conclusion I have to state that I trust the arrival of Mr. A. L. Poyson is now not far distant, for in then wishing to magnify my labours in the least I would with much deference draw attention to the fact that from April 26th I have had no assistant whatever, and I begin to find I cannot do justice to the two fold duties, especially at this time of year.

I have the honour to be,
Sir,

Your most Obedt. Servant
W. H. M. M. M.
Superintendent

Leo P.

C. to No 1385 W. 13. 6. 85
No 742 C. 9. 4. 85
B. to 1478 W. 24. 6. 85
C. to No 1385 W. 13. 6. 85

Buildings & Rep.

From
The Super
Madras Harbour

No 1659 Wap
A

N 19 W

Dated 3 July 1885

N of Enclosures

Progress Rep
Submits - for

C. 870522. 17. 7. 85

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

from the Supt Madras
Harbour works } H. & No 19 W dated 3rd July 1885

Communicated to the
Judicial Department with
reference to para 9 and
with a request that G. O. No
1522 dated 9th June 1886
may be reconsidered.
As the services of the Sarishla-
dar Magistrate of Saidapet
are not always available,
it appears advisable that
a special Magistrate
should be appointed at
Pallavarum in the interest
of the Harbour works.

2. Extract para 7 of the
foregoing report will be
communicated for the information
of

of the Railway Branch of
this office Department.

3. Considering the amount
of sickness that has
prevailed among the members
of the staff, Government
consider the progress reported
to be satisfactory.

4. The Government are
well aware of the large amount
of work that has unavoidably
fallen on the Supt of the
works during the past two
months. The sanction
of the Government of India
to the appointment of Mr.
A. L. Poyson as Assistant
Superintendent is daily
expected.

CD
7.7.85

1.

The Supt M. H. Works
" P. W. D. Reg. Branch
" Examr P. W. accts
" Judicial Dept

Q. 8.7.85 R. 7.7.85

Q. 5.8.72

(2)

Q. 5.8.72

1053W

J

13th
1659W
A
PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 15th July 1885

READ the following

From
The Supt. M. H. Works (M. H. No. 19 W of 3rd July 1885)

5. Taking into con-
sideration the difficulties
which have been encountered,
arising from the state of the
weather and from sickness
among the staff, the Right
Honble the Governor in Council
considers the progress made
on the Madras Harbour
Works during June to be
satisfactory.

2. The Government are well
aware of the large amount
of work that has unavoidably
fallen on the Superintendent

Marine Dept
Dec 21 7 83

$$\frac{1659}{9}$$

5872

Gobt. of Madras.

PUBLIC WORKS.

18/7/81

Date

Re

To

G.O. 15 July 1881, No. 1659

Madras Harbour

works

Orders in principle

sent off - for June

10/7

12/8/81