

(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.	706 (W)	Press ~~Mis.~~
Dated	8-9-	1877.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

8th September 1877, No. 706 W.

Buildings and Roads.

Civil Works.

Read the following paper :—

No. 57. From F. N. THOROWGOOD, Esq., C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 1st September 1877, No. 42 W.

I HAVE the honor to report the following amount of progress during the month of August.

2. NORTH PIER.—The movement of the sand accumulation has been so capricious and the surf so constant that the divers have been unable to prepare the base for another course of blocks, although diving has been carried on whenever even for three hours it could be managed. As an instance of the variable depth of this sand, I may state that whereas on the 27th August, there was only 3 feet over the base, on the 29th the sand was 6 feet deep, causing the broken water to come over the pier end with great force.

3. Mr. Parkes has not the slightest doubt, and I agree with him entirely that this sand is a purely local trouble. With change of wind it will vanish. It is very annoying at present, but I think the trouble will only last a few weeks longer.

4. The work of protection against probable storms from north-east in October has been carried on, and fifteen blocks have been placed to protect the surf bank where it joins the regular work.

5. BLOCKMAKING.—None of the regular blockmaking work by machinery has been carried on during the month, but six blocks have been built at the south pier for protecting the slope of the pier during the north-east monsoon. These will be set either by the Titan or the Travelling Jib Crane from the north pier.

6. CONCRETE BLOCK PLATFORM.—The south concrete block platform is now completed, and blockmaking upon it will be resumed as soon as possible.

7. There are now two platforms, each capable of holding 426 blocks, one platform specially for the north pier, and one for the south, but the lines of railway are so arranged that the blocks from either platform may be used for either pier.

8. STONE SUPPLY FOR NORTH PIER.—No stone has been received by the Madras Railway during the month, but I have asked that stone should be sent, if possible, before or on the 30th August. I believe I am not doing wrong in not pressing the stone supply during the famine traffic and while I have a full block-yard.

9. SOUTH PIER WORKS.—The south surf bank may now be reported as complete in length. All stone at present sent from the quarry (at the 15th mile, South Indian Railway) is used in widening the slopes so much as to allow the Titan to be advanced. The amount of stone used is 26,075 tons as nearly as can be estimated. As no weigh bridge has been entirely at the service of the Harbour Works, the weight has to be

judged much by the actual load which the wagon can carry. In testing a few wagons weight at intervals, some were found to weigh more, and some less than the nominal loaded amount. The average has therefore been taken.

10. The length of the surf bank at present is 562 feet from the point D. The length advanced during August (that is, up to the 21st when tipping was stopped) is 62 feet. The depth of water at the end may be judged at 10 feet, but the surf prevents an accurate sounding from being taken.

11. Unless some very severe storm occurs to make me alter my views before I can get protective blocks down, I must report now that the south surf bank has never once been washed back, save during the cyclone of May 16th and 17th.

12. The south pier Titan Crane is in a far advanced state, and will, I trust, be in working order in two weeks time. The Titan on the north pier was in working order by September 28th, 1876.

13. A difficulty of some magnitude will be met with in carrying concrete blocks from the north to the south pier, but this must be overcome by taking them very early in the morning and very late at night.

14. BEACH RAILWAY.—The railway along the beach connecting the block ground with the south pier works was completed throughout its entire length on the 20th August. No blocks have been conveyed along it as yet. The portion constructed during August is shown on the accompanying plan in red lines.

15. GENERAL MATTERS CONNECTED WITH THE WORKS.—The crates of laterite have not been visited during August, but this will be done at an early date in September. The tank 4.0 x 4.0 x 4.0 has been towed out and successfully sunk into its place in 4½ fathom water. A second tank is being prepared for deeper water.

16. The Harbour Committee met once during the month at this office on August 20th. The business was only of a general kind.

17. On August 29th His Excellency the Viceroy and His Grace the Governor paid a visit to the north breakwater, but the sea was too heavy at times for diving to be carried on.

18. MEDICAL ATTENDANT FOR WORKS.—I have long been in a difficulty about a medical attendant for the Harbour Works, and have never received any definite information from different officials whom I have spoken to on the subject. At the last Committee Meeting I brought the matter forward, and it was resolved that I should ask for instructions from Government on the subject. It has always been the custom to send accidents to the Monegar Choultry, but for cases of illness there is no regular Medical Officer for the works. I am not certain whether all the men on the works are entitled to free medical attendance, but I have acted as if they were not, at the same time I have charged to "Contingencies" the cost of medical attendance on several European Foremen.

19. STORES.—The only ship that arrived with stores during August was the S.S. *Sultan* which brought some joiners tools and linseed oil.

20. CORRECTION OF PARAGRAPH 8.—Although it is stated in paragraph 8 that no stone has been brought by the Madras Railway, I should explain that about 430 tons of ballast for the Beach Railway have been received.

No. 58. ORDER THEREON, 8th September 1877, No. 706 W.

As the wind may about this time be expected to be variable, the Government desire Mr. Thorowgood to report weekly any change of conditions which may seem to bear upon the question of sand formation.

2. The Harbour Works Establishment is in the same position as any other Government Establishment, as regards medical advice. The Surgeon-General, Indian Medical Department, will be instructed accordingly in the Public Department.

(True Extract.)

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

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

Exd. A. Grubert.
Spare Copies

From

THE SUPERINTENDENT,

MADRAS HARBOUR WORKS.

To

Colonel E. A. Ford, R. E.

Secretary to Government, P. W. Dept

Buildings & Roads Branch,

Fort George

MADRAS,

1st September 1877.

SIR,

1. I have the honor to report the following amount of progress during the month of August.

North Pier

2. The movement of the sand accumulation has been so capricious, and the surf so constant, that the divers have been unable to prepare the base for another course of blocks, although diving has been carried on whenever wind for 3 hours it could be indulged. It is an instance of the variable depth of this sand. I may state that whereas on the 27th August, there was only 3 feet over the base, on the 29th, the sand was 6 feet deep, causing the broken water to come over the pier end with great force and noise.

3. Mr. Parkin has not the slightest

doubt, and I agree with him entirely that this sand is a purely local trouble. With change of wind it will vanish. - It is very annoying at present, but I think the trouble will only last a few weeks longer.

4. The work of protection against probable storms from North East in October has been carried on, and 15 blocks have been placed to protect the surf bank where it joins the regular work.

5. None of the regular blockmaking work by machinery has been carried on during the month, but 6 blocks have been built at the South Pier for protecting the slope of the pier during the North East Monsoon. These will be set either by the Titan or the Travelling Jib Crane from the North Pier.

6. The South concrete block platform is now completed, and blockmaking upon it will be resumed as soon as possible.

7. There are now two platforms each capable of holding 426 blocks, one platform

Stone supply for North Pier

specially for the North pier and one for the South, but the lines of railway are so arranged that the blocks from either platform may be used for either Pier. -
8. No stone has been received by the Madras Railway during the month, but I have asked that stone should be sent if possible before or on the 30th August. - I believe I am not doing wrong in not pressing the stone supply during the famine traffic and while I have a full block-yard.

Blockmaking South Pier Works

Concrete Block Platform

9. The South Surf bank may now be reported as complete in length. All stone at present sent from the quarry (at the 15th mile South Indian Railway) is used in widening the slopes so much as to allow the Titan to be advanced. The amount of stone used is 26,075 tons as nearly as can be estimated. As no weigh bridge has been entirely at the service of the Harbour Works, the weight has to be judged much by the actual load which the wagon can carry. In testing a few wagons

weight at intervals, some were found to weigh more, and some less than the nominal loaded amount. The average has therefore been taken. —

10. The length of the surf bank at present is 562 feet from the point D. The length advanced during August (that is up to the 25th when tipping was stopped), is 62 feet. The depth of water at the end may be judged at 10 feet, but the surf prevents an accurate sounding from being taken.

11. Unless some very severe storm occurs to make me alter my views before I can get protective blocks down, I must report now that the South surf bank has never once been washed back, save during the cyclone of May 16th + 17th. —

12. The South Pier Titan Crane is in a far advanced state, and will I trust be in working order in two weeks time. The Titan on the North Pier was in working order by September 20th 1896.

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5 3
will be met with in carrying concrete blocks from the North to the South Pier, but this must be overcome by taking them very early in the morning and very late at night. —

Railway 14. The railway along the beach connecting the block ground with the South Pier works was completed throughout its entire length on the 20th August. No blocks have been conveyed along it as yet. The portion constructed during August is shown on the accompanying plan in red lines. —

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etc with the 15. The crates of laterite have not been visited during August, but this will be done at an early date in September. The tank 4.0 x 4.0 x 4.0 has been towed out and successfully sunk into its place in 1½ fathom water. A second tank is being prepared for deeper water.

16. The Harbour Committee met once during the month at this Office on August 20th. The business was only of a general kind. —

17. On August 29th His Excellency the Viceroy, and His Grace the Governor, paid a visit to the North breakwater, but the sea was too heavy

heavy at times for diving to be carried on.

18. I have long been in a difficulty about a Medical Attendant for the Harbour Works, and have never received any definite information from different officials whom I have spoken to on the subject. At the last Committee meeting I brought the matter forward, and it was resolved that I should ask for instructions from Government on the subject. It has always been the custom to send accidents to the Monegar & country, but for cases of illness there is no regular Medical Officer for the works. I am not certain whether all the men on the works are entitled to free medical attendance, but I have acted as if they were not, at the same time I have charged to "Contingencies" the cost of medical attendance on several European foremen.

Medical Attendant
for works

19. The only ship that arrived with stores during August was the S. S. "Vittoria" which brought some joiners tools and finished oil.

Stores

20. Although it is stated in paragraph 8 that no stone has been brought by the Madras

Railway

Correction of
Paragraph 8.

Railway, I should explain that about 120 tons of ballast for the Beach Railway have been received.

I have the honor to be,
Sir,
Your most Obedient Servant,

J. H. Mowgood.
Superintendent
Madras Harbour Works

COH-8-77 No 575 W.

Buildings & Roads

From The Superintendent
Madras Harbour Works

No 42 W.

Dated 1st September 1877

No of Enclosures 2

with Sub-enclosures

Submits Progress Report of
the works during August
1877.

408. Sept/77 No 57

Ar 3-9-77.

PUBLIC WORKS DEPARTMENT.

Letter from the Superintendent, Madras
Harbour Works, No. 42 W., dated 1st
September 1877.

FOR ORDERS.

E. A. M. J. P. E.
Secretary to Government
P. B. D.

For. Secy
Sept 1/77.

As the Harbour Works is being
carried out departmentally
the relative merits, as regards
judicial attendance in the same
position as all the Govt.
Establs. for the kind
of work than shifted to the
Govt. Work. W. I. &
Especially any change of
view as regards sand
formation. &c.

11/1 5/10

1/1 5/10

Wm

FOR ORDERS.

Handwritten notes in the left margin, including "706W" and "8 Sept 77".

7.9.77

Wb
7.9.77

Cin 3-9-77

B & Roads

No 706 W Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 8th Sept 77

Read the following:—

Letter from the Sup^t Madras Harbour Works } (H.E. No 42 W. dated 1st Sept 1877)

As the wind may about this time be expected to be variable, the Government desire Mr. Thoroughgood to report weekly any change of conditions which may seem to bear upon the question of sand formation.

2. The Harbour Works Establishment is in the same position as any other Government Establishment, as regards Medical advice, and the Surgeon General Indian Medical Department will be instructed accordingly.

in

M.L.

in the Public Department

507
7/9

W.P.

3
To The Supt. Madras Harbour Works
" Public Department
" Marine. DO
37
No. 1 Des. 8-9-77
S.C. to D.E. by dep. 11-9-77
To the Sub. & Marine Dept. 11-9-77.

Referred



Publ. of 1877 ~~Orders~~
★
PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O. 8th Sept 1877, No. 705W

Nos. 57-58

Madras Harbour Works

Order on Progress report.

1st — ^{for} during August 1877.

Encl 8.9.77

S.C. to Mr. Maudslayi 11-7-77