

25TH MARCH 1887, No. 910 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.  
Civil Works.

READ—the following letter from the Honorable R. W. BARLOW, C.S., Chairman, Harbour Trust Board, to the Secretary to Government, Public Works Department, dated Madras, 21st March 1887, No. 2749:—

I have the honor to forward, herewith, for the information of Government, copy of a letter from the Superintendent, Madras Harbour Works, No. 706 M., dated March 1887 (received 8th idem), reporting upon the progress made in the Madras Harbour Works during the month of February last.

2. I am desired by the Board to point out, in reference to the concluding portion of paragraph 9, that it is, in their opinion, to be regretted that the Superintendent has considered it necessary to refer to the vexed question of the rival contractors at Pallavaram; but, as he has done so, they desire again to place on record that, but for Mr. Thorowgood's unauthorised action in appointing a new contractor, without any reference to them, there would have been, they believe, little or no interruption to the supply of stone, and certainly nothing commensurate with the saving effected; the difficulties which have subsequently arisen being almost entirely due to the obstacles thrown in the way of the Board's contractor by the Superintendent's nominee.

ENCLOSURE.

From F. N. THOROWGOOD, Esq., M. INST., C.E., Superintendent, Madras Harbour Works, to the Chairman, Harbour Trust Board, Madras, dated March 1887, No. 706 M.

I have the honor to submit, herewith, a plan showing the progress on these works during the past month of February. The rate of advance is nearly 50 per cent. greater than in January, notwithstanding stoppage on three days because of rough sea, and on two days on account of universal holidays.

2. *North pier works.*—Rubble base has been deposited in advance of the north pier superstructure, and also has been used to bring the north foreshore to its full width parallel to the built work. For these purposes, 6,572 tons of stone have been used. The work of setting blocks has gone on fairly well although the death of one diver and the sickness of three others retarded work to some extent. There were 117 blocks set during February, advancing the new wall by a length of  $73\frac{1}{2}$  lineal feet. The total length of new work now built from point F (on plan) is  $358\frac{1}{2}$  lineal feet.

3. All the superstructure built during January and February is as yet unprotected by a wave-breaker, but during the early part of April this will have to be remedied. The crane for depositing the wave-breaker blocks can get through such a lot of work in one day, when it once starts work, that it will quickly use up all the blocks that will be available.

4. *Concrete block-making.*—Concrete block-making was carried on as usual during the month, 195 blocks being added to the stock. The stone crushing machinery underwent some repairs, but not sufficient to cause a stoppage of work. I have been making some experiments, with a view towards getting rid of the very fine stone dust which comes from the stone crushers, and which is to a certain extent injurious to all concrete. If this can be completely got rid of, the blocks will be stronger, and consequently will sooner be available for work. Whether I can manage to wash out all this dust without serious extra expense or delay remains yet to be seen. At present I find that its absence gives more than 10 per cent. additional strength to concrete.

5. *South pier works.*—Boats were at work forming and extending the base of the south pier as well as the limited supply of stone would permit, and 3,784 tons were deposited in February. The blocks fallen over on the top of the rubble base in advance of the new work caused much trouble with the divers, but with care 14 were lifted out and placed on trucks, whence they were taken and dropped in the north pier wave-breaker.

6. In the superstructure of the south pier there were 100 blocks set, advancing the work by a length of 61 feet. The work is even and regular and the curve satisfactory.

7. *Recovery of old Titans.*—One diving boat has been wholly engaged in taking up the remains of the old Titan cranes, which must be removed before the rubble base can be deposited for the pier ends. Nearly the whole of the south Titan has been recovered, in a great state of rust and decay, and more cannot be removed till some blocks are taken away. For this work I am having a special raft prepared, and, in the meantime, am borrowing that of the Marine Department. At present the divers are working at the submerged north Titan, of which the complete crab and one top girder have been recovered.

8. *Wave-breaker crane.*—The wave-breaker crane has been doing very little during February as it has one of its bottom wheels disabled. Spare wheels have arrived from England, and one is now being fitted on. The crane has dropped over 14 old blocks recovered from south pier, and two ordinary wave-breaker blocks.

9. *Pallavaram quarries.*—On 21st February I received, for the second time, the Board's orders to introduce H. M. A. Badsha Sahib as the new contractor at the Pallavaram quarries, and on the 22nd I stopped all quarrying of the temporary contractor and made him confine his operations to loading up stone already quarried. On 24th February I received a telegram saying that all the loading coolies had run away and consequently the stone traffic from Pallavaram has been bad and irregular. On 1st March I had prepared a large portion of the quarry for the new contractor. I am sorry to state that I do not alter my opinion that this sudden change of contractors will be a serious evil to the works, and although I have not yet been informed what rates the Board have accepted for the new work, I do not expect that the financial aspect of affairs during the next two months (as regards Pallavaram quarries) will be satisfactory.

10. During February 13,638 tons of stone have been received from the quarries, of which 3,095 were supplied since all quarrying was stopped to the temporary contractor; my hope is to clear out nearly all the present contractor's stock by 15th March and measure up what remains; in the meanwhile the new contractor is collecting and quarrying a fresh supply. At present he has hinted that he will not be able to load a train before 31st March, but I hope this will be improved upon.

11. *Stores from England received on works.*—The following stores were received during February from England:—

By the S.S. *Mount Tabor*.—28 steel wheel tyres.

Do. S.S. *Goorkha*.—100 tons Portland cement.

Do. S.S. *Navarino*.—do. do. also iron chains, steel rope, 2 special wheels for crane and steel pinions for Titans.

Do. S.S. *Chusan*.—Files, wood screws, copper wire, surveying lines, linseed oil and chocolate paint.

12. There were also purchased locally 200 tons of steam coal and 741 timber sleepers.

13. On the 1st February the works were visited by His Excellency the Governor of Madras, accompanied by the Chairman, Harbour Trust Board. His Excellency witnessed the making of concrete blocks, and the setting of them in the work, as well as the dropping into the sea from the wave-breaker crane.

ORDER—dated 25th March 1887, No. 910 W., Public Works.

Recorded.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,  
Secretary to Govt., P.W.D.

To the Chairman, Harbour Trust Board.

„ Marine Department.

„ Consulting Engineer for Railways.

Exd. E. Fernandez.

Spare Copies

BUILDINGS AND ROADS.  
CIVIL WORKS.

Govt. of 1887 Madras.  
PUBLIC WORKS.

Dated March, 25th.

Recd.

Encl.

G.O., 25th March 1887, No. 910 W.

MARCH.

Madras Harbour Works

Report of progress on the — during  
February 1887, recorded.

2ND MAY 1887, No. 1190 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.  
Civil Works.

READ—the following letter from the Honorable R. W. BARLOW, C.S., Chairman, Harbour Trust Board, to the Secretary to Government, Public Works Department, dated Madras, 20th April 1887, No. 289 :—

I have the honor to forward, herewith, for the information of Government, copy of a letter from the Superintendent, Madras Harbour Works, No. 19, dated 5th March 1887, with a plan, reporting upon the progress made on the Madras Harbour Works during the month of March 1887.

2. With reference to the Superintendent's paragraph 10, the Board have unanimously resolved not to allow Hajee Mahomed Abdulla Badsha Sahib Khan Babadur any enhancement of rates, but to hold him to his contract.

3. As regards the concluding portion of paragraph 6, I would observe that the Board's decision was not arrived at till the 4th April, and the result was communicated to the Superintendent the next morning.

ENCLOSURE.

From F. N. THOROWGOOD, Esq., M. INST. C.E., Superintendent, Madras Harbour Works, to the Chairman, Harbour Trust Board, dated Madras, 5th April 1887, No. 19.

I have the honor to submit, with a plan, a report of the progress on these works during the past month of March. It is impossible to deny that the weather has not been so favorable for marine engineering as it often is at this time of year, and on the 21st or 22nd the sea was more boisterous than usual owing to a cyclone which touched the coast south of Negapatam.

2. *North Pier Works.*—In the rubble base of the north pier hardly any work was done owing to want of stone from Pallavaram. A total of 718 tons was deposited, of which 533 tons were large boulders to go beneath the wave-breaker blocks. A large quantity of this stone will be required during the current month.

3. In the superstructure the advance has been good, but not up to the best rate of work done in the original design. There were set in March 177 blocks, advancing the work by a length of 111 feet as compared with 73½ in February and 54½ feet in January. The current month of April will be chiefly occupied in protecting what has now been built, with wave-breaker blocks. The total length of new wall now built is 470 feet from point F on plan.

4. During March one diving boat was set to work at the old north pier head where one titan crane lies buried. A good deal of the crane has been recovered, and also some of the 27-ton blocks overlying the crane. For this purpose an excellent pontoon, the credit of which is more due to Mr. Lee Pogson than to any one else, has been constructed, by means of which a block can be slung heaved up and floated away to be under the scope of a crane, which lifts it up and drops it into the wave-breaker. It answers admirably. The pontoon's power of floatation is achieved by attaching a large iron buoy to each of its four corners.

5. Before April 30th all cranes, diving boats, pontoon, &c., will have to be withdrawn home to shore.

6. *Concrete Block-making.*—Concrete block-making has been going on at a very poor rate during March, partly on account of the very deficient supply of stone from Pallavaram, and partly because the present contractor's time being up on March 31st he latterly took no interest in the work and I had to put on men of our own to supplement his deficient labor, charging their wages to him. I have not up to this date

\* Information since received.

(5th April) learned whose tender for this work was accepted on March 28th\* and have consequently forced the present man to keep on up to the 16th instant, that is, for eight more working days.

7. There were only 139 blocks made during March instead of 212 the maximum number that can at present be made. The evil effect of this will not be felt for two months, and I fear this current month of April will not give a good return of blocks, as a new contractor is sure to find difficulties which he knew nothing of when he tendered.

8. *South Pier Works.*—At the south pier rubble base and foreshore was more needed than at the north and 5,246 tons of stone were deposited besides 81 tons of large boulders to form the bottom of the wave-breaker. As reported last month, and I fear the obstacle will last for two months more, great difficulty is caused at the south pier by the 27-ton blocks lying directly in the line of building. Of these no less than eighteen were picked up in March, and were deposited in the wave-breaker of the north pier. I ought to state for information that these recovered blocks *must* be taken round to the north pier to be dropped into the sea as, while the titans are working forward, it is only at the north pier we have a crane capable of dropping the blocks over the side.

9. The length of wall built at the south pier in March was 54½, in February it was 61 feet, and in January 12¾ feet. The total length of new work from G (on plan) was 300 feet on March 31st.

10. *Pallavaram Quarries.*—As stated in my progress report for last month the working of the quarries is unsatisfactory, and the contractor, Hajee Badsha Sahib, has asked me to allow him to give up the contract as he finds he cannot do the work at the rates tendered. To reply decisively to this is evidently beyond my power. The friends (or enemies) of the late Kazim Ali Sahib appear to have been very obstructive, and I am perfectly certain that if it had not been for my frequent and personal interference either the railway line would have been cut or a bridge pulled down, which would have been a very awkward matter to deal with. I myself do not think that Hajee Badsha Sahib is in any way saying what is unreasonable when he demands higher rates, but surely he ought to have tendered higher at first. During March 9,600 tons of stone were sent down to Madras as compared with 13,638 tons in February, 16,696 in January, and 22,050 tons in March 1886. In this month of April it would be undesirable to stop quarrying, but in May such a course would be of less importance.

11. The reason of the insufficient supply is simply that there are not enough good coolies at the quarry, and no satisfactory work will be done until more than double the number of men are employed, all men being of a good stamp to endure the very severe work in those hot quarries.

12. The whole quarrying area, together with the stone lying within the quarry, was handed over to the new contractor on March 15th, and on the 17th he loaded his first train.

13. *Stores received on Works.*—The only stores of importance received on the works during March were 285 sleepers from the West Coast.

ORDER—dated 2nd May 1887, No. 1190 W., Public Works.

Recorded.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,  
Secretary to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board, with one plan.  
„ Marine Department.

Exd. P. L. Pereira.  
Spare Copies

BUILDINGS AND ROADS.  
CIVIL WORKS.

Govt. of 1887 Madras.  
PUBLIC WORKS.

Dated May, 2nd.

Recd.

Encl.

G.O., 2nd May 1887, No. 1190 W.

MAY.

Madras Harbour Works

Report of progress on the — during March  
1887, recorded.

[L] C  
Reference on No. 901 of 1887.  
In replying the above should be quoted.



Marine DEPARTMENT.

Read the following from the Chairman,  
Harbour Trust Board, Madras, dated,  
12<sup>th</sup> October 1887, No 4192.

Forwarded to the Public Works  
Department for favour of remarks.

(By order)

For St George  
22<sup>nd</sup> Oct 1887

Assistant Secretary

To

The Public Works Department }  
with papers }

2  
x 1.0

PWC No 8483

Public Works Department.

Current No. 8483

Letter No. 4th

Dated the 22nd Oct/89

From the Asst. Secy. Marine Dept.

NOTE OF REMARKS.

The accompanying letter from the Chairman of the Madras Harbour Trust Board No 4192 of 12th Oct/89 applies for the sanction of Govt. to an advance of Rs 10,000 being made to the Stone Contractor Hage Mahomed Abdulhale Budeha Sahib Khan Bahadur. The Chairman in his letter states that the Contractor asserts that there is an accumulation of 50,000 tons of stone, steadily increasing which is taken at

No 3883C of 5-11-89

Ry 24.10.89

Ex 3

11900 25.5.89

T  
24.10.89

within of the stated  
 given in the Chairman's  
 letter with 7 + per cent  
 ton for rough rubble  
 and 8 + per cent for  
 clean cut chips the  
 value of the stone  
 accumulated would  
 be Rs 22,917 or Rs 27,344  
 according to the  
 description of material  
 quarried. The Acting  
 Superintendent, it is  
 stated, has been  
 requested to verify  
 the quantity of stone  
 stated to have been  
 collected, and if  
 found correct

the advance requested  
 seems reasonable -

20/10/84

The Acting Supt has  
 measured up the stone  
 and finds the quantity  
 to be 36,000 tons & its  
 value to the Harbour Works  
 12,000 Rs - These figures  
 are very different from  
 given by the Contractor -

In our remarks we may  
 say under 37,000 tons  
 and value as it lies  
 on the ground under

13,000 Rs  
 26.10.84

No 3883C of 5<sup>th</sup> Nov 1884 C No 8483

State  
 by Mr Mr Dept

The Chairman of  
 the Harbour Trust  
 Board submitted  
 for the sanction  
 of Govt, under  
 under clause 2  
 Section 63 of Act II  
 of 1866, an agreement  
 entered into with  
 with Hodge Mahomed  
 Abdulla Badsha  
 Sahib "Khan Bahadur"  
 for the supply of  
 stone for the Harbour  
 Works.

The rates allowed  
 are for rough  
 rubble 7 - 4 per  
 ton and for clean  
 cut chips 8 - 9 per ton.

These rates compare favorably with those given under a previous contract, and <sup>may</sup> ~~ought~~, it is considered, be accepted.

It is also proposed to give the Contractor an advance of Rs 10,000 against stone quarried. It is stated that there is an estimated accumulation of 50,000 tons of stone which is steadily increasing. The value of this would amount to Rs 22,917 or Rs 27,344 according to the description of material quarried. The Agt. Supt. has, it is understood, since measured up the stone, and found

that it is under 37,000 tons, and its value to the harbour works, as it lies on the ground, less than Rs 13,000. This figure differs materially from those given by the Contractor; but, under the circumstances mentioned by the Chairman of the Board, there seems no objection to the advance of Rs 10,000 being sanctioned.

encl  
27/10/87

Recd Boulders.

27.10.87

R.S.

3/11/87

The Marine Dept  
with paper returned  
Dec 5-11-87 with 3 boxes

No. 1190 H. 2-5-87  
 - 910 H - 25-3-87  
 - 1898 H - 14-7-87  
 - 1316 H - 13-5-87

No. 3883 C of 5-11-87

7 cond  
 5/1/88  
 15 H  
 5/11

W  
 W



PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper

From the Chairman, Harbour Trust Board, Madras, dated 12<sup>th</sup> October 1887 No. 4192, forwarding for sanction, an agreement entered into by the Harbour Trust Board, with Hodge Mahomed Abdulla Badsha Saib "Khan Bahadar" for the supply of stone required from Pallaveram, for the use of the Madras Harbour Works.

From the Public Works Department, dated 5<sup>th</sup> November 1887 No. 3883 C.

Order thereon 1<sup>st</sup> December 1887 No. 539  
 The contract submitted by the Chairman, Harbour Trust Board, is approved, and in the circumstances explained in the foregoing papers, the Government have no objection to the advance of Rupees (10,000) ten thousand proposed.

S. 10/11/87  
 11/11

P. 14  
 13

proposed to be made to the Contractor.  
/ True Extract /

Isinger  
Asst Secretary

To The Public Works Department  
" Accountant General  
Chairman, Harbour Trust, Board

2.5.8

3883 C 7 6/11/87  
1190 W 7 2/6/87  
910 W 7 25/3/87

[ 6 ]

Gobt. of (188) Madras.

To

The M<sup>d</sup> Dept



192-12-87

Proceedings, dated 1-12-1887  
No. 539.

Subject.

Approving Contract  
with Stone Contractor  
& an advance of  
Rs 10,000 to him.

No. 3299 W of 2nd Dec 87

Recorded.

2.12.87

88/12 8/12 17/12

LS

2/12/87

B 11/2/12