

C.N. 904

Subt. of 1895 Madras.
Marine
PUBLIC WORKS.

22-11-05
2630/9629-1-06 ✓

Print soon

Dated

25/11/95

Recd.

Encl.

G.O., 25 Nov 1895, No. 350

Marine

Screw Mooring
inside the Madras
Harbour.

Being in the opinion of the
Screw Mooring Board that the
of putting down certain
should be charged to
capital and stating that
question of granting a bonus
to the Engineer & the two
workmen may be con-
sidered after the work
has been completed.

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25/11

T.C.C.
25/11

GOVERNMENT OF MADRAS.
MARINE DEPARTMENT.

READ—the following paper:—

From W. J. H. LEFANU, Esq., I.C.S., Chairman, Harbour Trust Board, Madras,
to the Secretary to Government, Marine Department, dated 8th November
1895, No. 3192.

At the meeting of the Harbour Trust Board held on Friday the 25th October, the
Trustees had under consideration an estimate for putting down 38 screw-moorings
inside the Harbour, and I submit herewith copies of Resolutions 3 and 3 (a) then
passed.

2 The moorings, which are now being placed in position, were provided by
Government in connection with the original construction estimate, and were being
screwed down from the steam hoppers "Salisbury" and "Hobart," when, in
November 1881, the eastern walls of the Harbour, and both those vessels, were
wrecked in a cyclone. The screws, chains and other appliances have, from that date,
remained on hand as stock connected with the original estimate.

3. It has been very doubtful whether these screw-moorings could ever be
utilized, because the plant required for screwing them down would have been so costly
that the question arose whether it would not be more economical to abandon them,
and substitute one or other of the many forms of anchor now obtainable.

4. Presuming that the Board had decided to procure floating plant and screwing
engine to put them down, as was done in 1880 and 1881, the cost would have been
as follows:—

	RS.
Floating plant	1,20,763
Screwing engine	13,233
Labour	1,012
Total for first screw	1,35,008

To screw down 38 screw-moorings according to the old method would therefore
cost—

	RS.
Floating plant	1,20,763
Screwing engine	13,233
Total labour for 38 screw-moorings	38,456
Total for 38 moorings	1,72,452

5. The Board's Engineer has, however, adopted a method of placing these screw-
moorings in position, by means of a jet of water, cutting a perpendicular hole in the
sand, to any required depth.

This has enabled him to put the screws down very much deeper than could have
been accomplished by the screwing process; and he can put one mooring down daily,
even when the sea inside the Harbour is disturbed by the ordinary monsoon swell.

6. This is not all, for, by the same means that Mr. Pogson cuts a hole in the
sea-bed, to put down a screw-mooring, he has experimentally taken the moorings up
again; the advantage of being able to do is obvious.

7. With regard to the screws and chains, they have already been paid for from
Capital, and form part of the stock on hand of materials for use when required, so
that only the cost of putting them down is to be met from the further sanction now

asked for, if sanctioned against Capital. Mr. Pogson has raised the question whether the stock value should not be paid by Revenue—Port Funds, and credited to the Reconstruction Estimate, as would be the case if the mooring plant were to be sold to any other purchaser. The Board is of opinion that Government laid down these appliances at Madras for a specific purpose, viz., to place them inside the Harbour whenever it might be ready to receive them, and considers that there should not be any charge whatever on the Revenue—Port Fund—Account. The favour of orders on this point is requested.

8. The estimated cost of placing 38 moorings in position by the method adopted by Mr. Pogson is as follows:—

	RS.	A.	P.
Fitting up six new buoys	578	10	0
Do. fenders to seven buoys	3,612	0	0
Labour in putting down 38 screws	5,510	0	0
Labour in fixing 40 new chains, and removing old anchor moorings	10,400	0	0
Cost of plant purchased	3,326	0	0
Do. hired	1,153	0	0
Contingencies, 5 per cent.	2,731	4	0
Total	27,310	14	0

The sanction of Government to this expenditure is requested against Capital.

9. The above sum will place in position 38 moorings, all sunk to a uniform depth of 20 feet below sea bottom, and it must be remembered that, of the old moorings screwed down before the cyclone of November 1881, only one could be got down to 18 feet. The saving is therefore in cash Rs. 1,45,141, and the moorings, instead of being irrecoverably sunk in the sea, can, at any time, be raised and, at very small cost, put down elsewhere.

10. The Trustees desire to bring prominently to the notice of Government the excellent services thus rendered to this port by Mr. Pogson, and request you to place the matter before His Excellency the Governor in Council for his favourable consideration and approval of the honorarium voted to Mr. Pogson by the Board, viz., Rs. 2,500, and a bonus of Rs. 500 each to Messrs. Boteler, the General Foreman, and Günther, the Mechanical Foreman, who have ably assisted Mr. Pogson in his experiments and in successfully placing the moorings in position.

ENCLOSURE.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the Offices of the Board on Friday, the 25th day of October 1895.

3. Read letter from the Board's Engineer, No. 553, dated 10th October, submitting an estimate for putting down 28 screw-moorings inside the Harbour.*

* N.B.—The estimate has since been altered to 38 (vide paragraph 8, page 2).

Read notes by the Chairman and Mr. Ashpitel.

Resolved that the Chairman is requested to address Government.

3 (a). In connection with the above estimate the Trustees discussed the excellent service rendered to the Port by their Engineer Mr. Pogson, and by Messrs. Boteler and Günther, General and Mechanical Foremen; the plan adopted by the Board's Engineer for sinking the screw-moorings, instead of screwing them down in the ordinary manner, having proved a complete success, resulting in a very large saving both in time and money.

Resolved that, subject to the approval of His Excellency the Governor in Council, a honorarium of Rs. 2,500 be granted to Mr. Pogson, and of Rs. 500 each to Messrs. Boteler and Günther.

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

ORDER—No. 350, Marine, dated 25th November 1895.

The Government agrees in the opinion of the Harbour Trust Board that the cost of putting down the moorings in question should be charged to Capital. The question of granting a bonus to the Engineer and to each of the two Foremen may be resubmitted after the work has been completed.

(True Extract.)

Under Secy. to Government.

To the Chairman, Harbour Trust Board.
" Presidency Port Officer.
" Accountant-General.

Exd. T. K. Narayana Aiyangar.
Spare Copies

Gobt. of {1895} Madras.
MARINE.

Dated November, 25th.

Recd.

Encl.

G.O. No. 350, 25th Nov. 1895.

NOVEMBER.

Screw-moorings inside the
Madras Harbour

Agreeing in the opinion of the Harbour Trust Board that the cost of putting down certain — should be charged to Capital, and stating that the question of granting a bonus to the Engineer and the two Foremen may be resubmitted after the work has been completed.

Marine Current No. 904

PUBLIC WORKS DEPARTMENT.
(MARINE.)

FROM

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS.

TO

THE SECRETARY TO GOVERNMENT,

Public Works Department.

(Marine.)

DATED 8th November 1895.

DESPATCHED 16th "

RECEIVED 18th "

ENCLOSURE

No. 3192

SUBJECT.

MADRAS HARBOUR.

Reporting that Screw Moorings have been successfully placed in position within the — at a saving upon the old method of screwing them down of Rs. 1,45,141; submitting an estimate for sanction, amounting to Rs. 27,311, and soliciting the sanction of His Excellency the Governor in Council to payment of Rs. 2,500 honorarium voted by the Board to their Engineer Mr. Lee Pogson, and of a bonus of Rs. 500 each to the General and Mechanical Foremen.

Madras Harbour Trust,

SECRETARY'S OFFICE,

8th November 1895.

No. 3192

From

H. LE FANU Esq., I. C. S.,

CHAIRMAN, HARBOUR TRUST BOARD,

Madras.

To

THE SECRETARY TO GOVERNMENT,

Public Works Department.

SIR,

At the meeting of the Harbour Trust Board held on Friday the 25th October, the Trustees had under consideration an estimate for putting down 38 screw moorings inside the Harbour, and I submit herewith copies of Resolutions 3 and 3 (a) then passed.

2. The moorings, which are now being placed in position, were provided by Government in connection with the original construction estimate, and were being screwed down from the steam hoppers "Salisbury" and "Hobart", when, in November 1881, the eastern walls of the Harbour, and both those vessels, were wrecked in a Cyclone. The screws, chains, and other appliances have, from that date, remained on hand as stock connected with the original estimate.

3. It has been very doubtful whether these screw moorings could ever be utilised, because the plant required for screwing them down would have been so costly that the question arose whether it would not be more economical to abandon them, and substitute one or other of the many forms of anchor now obtainable.

4. Presuming that the Board had decided to procure floating plant and screwing engine to put them down, as was done in 1880 and 1881, the cost would have been as follows :—

Floating plant	...	...	...	Rupees	1,20,763
Screwing engine	...	...	...	"	13,233
Labour	...	...	...	"	1,012
Total for first screw					Rupees 1,35,008

To screw down 38 screw moorings, according to the old method would therefore cost:—

Floating plant	...	...	Rupees	1,20,763
Screwing engine	...	...	"	13,233
Total labour for 38 screw moorings	...	...	"	38,456
Total for 38 moorings	...	Rupees	1,72,452	

5. The Board's Engineer has, however, adopted a method of placing these screw moorings in position, by means of a jet of water, cutting a perpendicular hole in the sand, to any required depth.

This has enabled him to put the screws down very much deeper than could have been accomplished by the screwing process; and he can put one mooring down daily, even when the sea inside the Harbour is disturbed by the ordinary monsoon swell.

6. This is not all, for, by the same means that Mr. Pogson cuts a hole in the sea-bed, to put down a screw mooring, he has, experimentally, taken the moorings up again; the advantage of being able to do is obvious.

7. With regard to the screws and chains, they have already been paid for from capital, and form part of the stock on hand of materials for use when required, so that only the cost of putting them down is to be met from the further sanction now asked for, if sanctioned against capital. Mr. Pogson has raised the question whether the stock value should not be paid by Revenue,—Port Funds—and credited to the Reconstruction Estimate, as would be the case if the mooring plant were to be sold to any other purchaser. The Board is of opinion that Government laid down these appliances at Madras for a specific purpose, viz., to place them inside the Harbour whenever it might be ready to receive them, and considers that there should not be any charge whatever on the Revenue,—Port Fund—Account. The favor of orders on this point is requested.

8. The estimated cost of placing 38 moorings in position by the method adopted by Mr. Pogson is as follows:—

Fitting up 6 new buoys	...	Rupees	578	10	0
Fitting fenders to 7 "	...	"	3,612	0	0
Labour in putting down 38 screws...	...	"	5,510	0	0
Labour in fixing 40 new chains, and removing old anchor moorings	...	"	10,400	0	0
Cost of plant purchased	...	"	3,326	0	0
Do. hired	...	"	1,153	0	0
Contingencies 5 per cent.	...	"	2,731	4	0
		Rupees	27,310	14	0

The sanction of Government to this expenditure is requested against Capital.

9. The above sum will place in position 38 moorings, all sunk to a uniform depth of 20 feet below sea bottom, and it must be remembered that, of the old moorings screwed down before the Cyclone of November 1881, only one could be got down to 18 feet. The saving is therefore in cash Rupees 1,45,141, and the moorings, instead of being irrecoverably sunk in the sea, can, at any time, be raised, and, at very small cost, put down elsewhere.

10. The Trustees desire to bring prominently to the notice of Government the excellent services thus rendered to this Port by Mr. Pogson, and request you to place the matter before His Excellency the Governor in Council for his favourable consideration, and approval of the honorarium voted to Mr. Pogson by the Board, viz., Rs. 2,500, and a bonus of Rs. 500 each to Messrs. Boteler, the General Foreman, and Günther, the Mechanical Foreman, who have ably assisted Mr. Pogson in his experiments, and in successfully placing the moorings in position.

I have the honor to be,

Sir,

Your obedient servant,

Chairman,

Harbour Trust Board.

4

Extract of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the Offices of the Board on Friday, the 25th day of October 1895.

* * *

3. Read letter from the Board's Engineer, No. 553, dated 10th October, submitting an estimate for putting down 28 screw moorings inside the Harbour.*

Read notes by the Chairman and Mr. Ashpitel.

Resolved that the Chairman is requested to address Government.

3 (a). In connection with the above estimate the Trustees discussed the excellent service rendered to the Port by their Engineer, Mr. Pogson, and by Messrs. Boteler and Günther, General and Mechanical Foremen; the plan adopted by the Board's Engineer for sinking the screw moorings, instead of screwing them down in the ordinary manner, having proved a complete success, resulting in a very large saving both in time and money.

Resolved that subject to the approval of His Excellency the Governor in Council a honorarium of Rupees 2,500 be granted to Mr. Pogson, and of Rupees 500 each to Messrs. Boteler and Günther.

(True Extract.)

C. PINSENT,
Secretary,
Harbour Trust Board.

* N. B.—The estimate has since been altered to 38 vide para. 8, page 2.

No 350 Marine of 25 Nov 1895
P. W. DEPARTMENT.
(Marine)

Letter from the Chairman, Harbour Trust Board, Madras, No. 3192 dated 8th November 1895

FOR ORDERS.

The estimate of Rs. 27,310-14-0 should apparently go against the Construction Account as suggested by the Harbour Trust Board.

2. The question of the bonus to Mr. Pogson and to each of the two foremen requires decision, but the decision should in the opinion of the undersigned be deferred until the work has actually been done.

3. As far as can be seen from the papers any work done in this direction as yet has been entirely experimental, and it is observed that the comparison of cost between the two methods is based "on estimates" only, and there is good reason to believe that Mr. Pogson's estimates, especially as regards the comparative costs of various proposals are not always quite reliable.

4. It will be noticed that three fourths of the estimated cost of

Vide para 10 of the Chairman's letter.

Mr. Pogson showed me his new plan the other day - and if it does all he says he can do with it, it will I believe effect a very large saving - but as the note says let us first see how the results work out.

Mr. Pogson also told me that this plan of blowing out the sand by a jet of steam (or water) would enable us to rip out the Popalpur pier for a very small cost - and the sale of the old iron could then be effected at a profit - will the

C.E. please look into this - as that pier will, I am afraid, soon be a danger. W. Do not

screwing down the moorings is for
plant, which would presumably have
some value after the work was fi-
nished, but for which no credit is
given; this alone vitiates the com-
parison made in para 9 of the
Chairman's letter.

FOR ORDERS.

*Putting down Harbour
moorings at Madras*

350 Marine

W.

19.11

Cms

19

11/11

4.5-19/11. R 21/11

PUBLIC WORKS DEPARTMENT.

Marine Department.

*No 350 Marine of 25
November 1895*

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Letter from the Chairman, Harbour Trust Board, Madras, No. 3192 d/8-11-95.

J. P. R.

The Government agrees in the
opinion of the Harbour Trust Board
that the cost of putting down the
moorings in question should be char-
ged to Capital. The question of grant-
ing a bonus to the Engineer and to
each of the two Foremen may be resub-
mitted after the work has been com-
pleted.

J. P. R.

Cms

21/11

DESPATCHED

9 DEC. 95

To

The Chairman, Harbour Trust Board.

.. Presidency Port Officer.

.. Accountant General.

(40-4,000-2-11-95.)

C. B.

Print soon

W
Attention is invited to H.C.'s
remarks regarding the
Gopalpur Pier.
LB
Whorps.

Let me be this!

Let when the other

has mind -

We are sure you will

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