

(1) Number of pages 38
(2) Date of repair _____
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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. DEPARTMENT

G.O. No.	3402. W	Press.
B.P. No.		Mis.
Dated	26. 8. 1878	197.

17. 12.
Not to be folded or roughly handled

3402
1

GOVERNMENT OF MADRAS
PUBLIC WORKS DEPARTMENT

26th August 1878, No 3,401 W

Buildings and Roads
Civil Works.

Read the following paper —

No 295 From F N THOROWGOOD, Esq, Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 1st August 1878, No 22 W.

I have the honor to submit the following account of the progress on these works during the month of July 1878

2 NORTH PIER — The work of setting blocks at the north pier has progressed steadily and has not been seriously interrupted by bad weather, although on many days a heavy ground swell rolled in along the blocks. Between the 1st and 31st of July 192 blocks were successfully set, advancing the pier by a length of 112½ feet. The total length of block work is now 889 feet from the point B, of which 533 feet have been built since January 1st, 1878. The average rate of progress is therefore for the first seven months of this year 76 14 feet per month. The extreme end of the north pier on July 31st projected 110 feet seaward of the line of the outside of the head of the screw pile pier.

3 RUBBLE BASE — The rubble base has been tipped from boats and catamarans chiefly as reported for the previous month. The hopper barge *Salisbury* has been used on two occasions after being loaded with laterite on the lee side of the north pier, but I regret to state that I have not yet succeeded in making a satisfactory arrangement for loading her from the trucks. With a very slight swell the "send" of the vessel alongside the pier is considerable, but the advantages of using the steamer instead of the boats are so great that it is worth while to run some risk of slight damage in loading her.

4. The amount of stone deposited by various means in the base during July has been 5,821 tons against 3,784 tons deposited during the previous month of June. Most of this stone is laterite from Ambatoor, but a small portion comes from the quarries on the South Indian Railway.

5 BLOCK MAKING — On July 1st the making of blocks was resumed, and during the month 265 blocks were turned out by the steam machinery, of these 213 were made on the north block platform and 52 on the south. The blockmaking has kept ahead of the setting throughout July, there having been 246 blocks set in the piers and 265 made in the yard. The cement used has been almost exclusively of General Morgan's manufacture, and although from its bad color I feared the quality was faulty, I found from a series of severe tests applied to blocks made from it that there was no reason to doubt its being sufficiently strong, although not nearly so strong as what General Morgan had supplied on previous occasions. The attention of the Superintendent of the cement works was drawn to this fact immediately.

6 QUARRIES — The quarries at Ambatoor and on the South Indian Railway have worked well during July, but at the beginning of the month some difficulties arose in the traffic arrangements with both railways. From Ambatoor the total amount of laterite received during the month has been 6,493 tons, most of which has been thrown into the sea to form rubble base, the remainder having been used in the protective works north of the Harbour.

7 A total quantity of 6,715 tons of stone have been received from the South Indian Railway quarries, of which 4,438 tons have been chiefly used for the south

pier rubble base, and the remainder for blockmaking in the yard. From Chinnampatt the stone has been received during July, and I think of abandoning that site altogether.

8 The total tonnage of stone supplied to the works during the month from all sources is 13,208 tons.

9 SOUTH PIER—I regret to have to report a very small amount of progress at the south pier, but the immense amount of sand that has collected round this work has interfered seriously with the laying of blocks. The south pier is now going through a similar difficulty to that which beset the north pier in June, July, August, and September 1877. However, I am glad to give a more satisfactory rate of progress than was the case with the north pier last July. By means of the caisson and the dredger the divers have succeeded in setting 54 blocks with tolerably level beds. This has advanced the work by a length of 12½ feet, making the total length of blockwork from the point E 499½ feet on July 31st.

10 The sand has accumulated enormously to the south of the pier, and as a natural consequence the breaking surf is forced to retire seaward, and to such an extent that the present end of the work is in the line of broken water. This necessarily prevents divers from working excepting in particularly quiet weather. The termination of the south pier on July 31st was 35 feet westward or inside of the outer line of the head of the screw pile pier.

11 RUBBLE BASIN—The accumulation of sand above the base of the pier has interfered considerably with the tipping of stone in the neighbourhood of the blocks, but further out to sea the work has been carried on by mulla boats and catamarans—5,142 tons have thus been disposed of.

12 DRAINS—The large drain in the neighbourhood of the south pier has been diverted through the surf bank, but the rapid rate of accumulation of the sand has choked up the mouth of the diversion. When I get some iron pipes from the Public Works Shops it will not be difficult to keep the mouth clear of sand.

13 SEA ENCRoACHMENT NORTH OF HARBOUR WORKS—The sea continues to encroach along the shore from Mr. Coleman's house to beyond the village of Cassemode, but the encroachments appear to be more attributable to very high tides accompanied by heavy ground swell than to wave action caused by the north pier. The two fresh groynes that I have thrown out at Cassemode have proved very successful and have prevented further erosion in their immediate neighbourhood. The state of the coast is constantly watched and protective measures are still being carried on. During the past month 1,350 tons of large laterite have been used in these protective works, partly in constructing a groyne, and partly in protecting the slopes of the road along the beach.

14 EXPENDITURE—The total expenditure on the works up to the end of July 1873 is Rupees 29,93,548.

15 PLANS AND SECTIONS—One general plan of the Harbour and two sections accompany this report. The plan shows clearly the state of the sand around the south pier.

16 GENERAL—On the 25th July I received a long telegraphic message from Colonel Sir Andrew Clarke, R.E., at Simla, asking for full particulars of the progress of the work and of the state of the sand. To this I replied first by telegraph and then by letter, with plans and sections accompanying it. On the 31st I also had inquiries by telegraph from Lieutenant-Colonel Thomson, R.E., at Nainital.

17 I learn from Mr. Parkes that he is anxious to go thoroughly into the question of the intercepting sewer within Harbour limits, and it is probable that with this object he will visit Madras next January.

No. 235-A. From the same Officer, dated Madras, 14th August 1873, No. 26 W.

I have the honor to forward copies of the communications to and from Sir Andrew Clarke, and Lieutenant-Colonel C. S. Thomson, R.E., called for in your memorandum, No. 3,565, dated 12th instant.

From F. N. THOROWGOOD, Esq., Superintendent, Madras Harbour Works, to Colonel Sir ANDREW CLARKE, K.C.B., C.B., R.E., &c., Simla, dated Madras, 31st July 1878, No. 22 W.

I have the honor to acknowledge the receipt of a telegram from you on July 24th from Simla, asking about the state of the sand and the alterations in low water contour line in the neighbourhood of the Madras Harbour to which I replied by telegraph on the 25th as follows—

“Sand has advanced four hundred and forty feet on south side of south pier. Much is deposited in advance, and to the north of south pier below water. No other material change taken place in low water line. Works have stood perfectly and have twice been tried by heavy sea. I see no reason for altering design of station. Water is much quieter on the side of each pier. Length of north pier 866 feet, south pier 560 feet. Letter and plans follow. South pier much delayed by sand in foundations.”

2 I now send a plan of the Harbour as existing at the end of June, and longitudinal sections of the north and south piers.

3 The sand at the south pier is very troublesome, and is causing great delay in blocksetting, but we have advanced 43 feet during July by means of dredging away the sand. There is a considerable amount of sand between the end of the south pier and the iron pier, but judging from what happened at the north pier in 1877 it seems very probable that much of this will be washed out again by the north-east monsoon seas.

4 At the present date the length of the north pier is 889½ feet from the point B where the blockwork commences, and the south pier is 560 feet from the point E.

5 It seems certain that the south pier is now going through a similar obstruction in the way of sand to that which caused such trouble at the north pier from June to November 1877. When we have once got through this trouble I see no reason why each pier should not be pushed on at a rate of 90 feet per month throughout the whole year.

No. 296 ORDER THEREON, 26th August 1878, No. 3,402 W.

RECORDED

2 All such communications as those referred to in the letter from the Superintendent of the Harbour Works, No. 261 W, dated 14th August 1878, should be laid before Government as a matter of course.

(True Extract)

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

(True Copy.)

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

To the Superintendent, Madras Harbour Works
" Marine Department

End C Howarth
Spare Copies

ENGINEERING AND ROADS
CIVIL WORKS

Subt. of (1878) by order
PUBLIC WORKS.

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Line 1

Line 2

Line 3

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RECEIVED

11. 11. 11. 11. 11.

No. 2217

3402
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From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

To

Colonel G. A. Reid & Co
Secretary to Government - P.W. Dept.,
Buildings & Roads,
Fort St. George - 1st August - 1878

Sir,

I have the honor to submit the following
account of the progress on these works during
the month of July 1878.

North Pier

2. The work of setting blocks at the North pier
has progressed steadily and has not been
interrupted by bad weather, although on
many days a heavy ground swell rolled in
along the blocks. Between the 1st and 31st of
July, 192 blocks were successfully set advancing
the pier by a length of 112½ feet. The total
length of blockwork is now 589 feet from the
point B, of which 533 feet have been built since
January 1st 1878. The average rate of progress
is therefore for the first 7 months of this year
76.14 feet per month. The extreme end of the
North pier on July 31st projected 110 feet
inward of the line of the outside of the head

of the screw pile pier.

3 The rubble base has been tipped from boats Rubble Base and catamarans chiefly as reported for the previous month. The Hopper Barge Salisbury has been used on two occasions after being loaded with laterite on the bar side of the North Pier, but I regret to state that I have not yet succeeded in making a satisfactory arrangement for loading her from the trucks. With a very slight swell the wind of the vessel alongside the pier is considerable, but the advantages of using the steamer instead of the boats are so great that it is worth while to run some risk of slight damage in loading her.

4 The amount of stone deposited by various means in the base during July has been 5891 tons, against 3784 tons deposited during the previous month of June. Most of this stone is laterite from Ambator, but a small portion comes from the quarries on the South Indian Railway.

5 On July 1st the making of blocks Blockmaking was resumed and during the month 265 blocks

3402
blocks were turned out by the steam machinery of these 213 were made on the North block platform and 52 on the South. The block-making has kept ahead of the setting throughout July, there having been 246 blocks set in the piers and 265 made in the yard. The cement used has been almost exclusively of General Morgan's manufacture, and although from its bad colour I feared the quality was faulty I found from a series of severe tests applied to blocks made from it, that there was no reason to doubt its being sufficiently strong, although not nearly so strong as what General Morgan had supplied on previous occasions. The attention of the Superintendent of the cement works was drawn to this fact immediately. — + — — —

Quarries

6 The quarries at Ambator and on the South Indian Railway have worked well during July, but at the beginning of the month some difficulties arose in the traffic arrangements with both railways. From Ambator the total amount of laterite

Received

received during the month has been 6492 tons, most of which has been thrown into the sea to form rubble base, the remainder having been used in the protective works north of the Harbour.

7. A total quantity of 6710 tons of stone have been received from the South Indian Railway quarries, of which 4438 tons have been chiefly used for the South pier rubble base, and the remainder for block making in the yard. From Ichimnapett no stone has been received during July, and I think of abandoning that site altogether.

8. The total tonnage of stone supplied to the works during the month from all sources is 13208 tons.

9. I regret to have to report a very small amount of progress at the South pier, but the immense amount of sand that has collected round this work has interfered seriously with the laying of blocks. The South pier is now going through a similar difficulty to that which beset the North pier in June, July, August & September 1877. However, I am glad to give a more

Satisfactory

35
Satisfactory rate of progress than was the case with the North pier last July. By means of the caisson and the dredger, the divers have succeeded in setting 51 blocks with tolerably level beds. This has advanced the work by a length of 42½ feet, making the total length of block work from the point E 499½ feet on July 31st.

10. The sand has accumulated enormously to the south of the pier, and as a natural consequence the breaking surf is forced to retire eastward, and to such an extent that the present end of the work is in the line of broken water. This necessarily prevents divers from working excepting in particularly quiet weather. The termination of the South pier on July 31st was 35 feet westward or inside of the outer line of the head of the screw pile pier.

11. The accumulation of sand above the base of the pier has interfered considerably with the tipping of stone in the neighbourhood of the blocks, but further out to sea the work has been carried on by masula boats and

Rubble Base

catamarans, & 142 tons have thus been disposed of.

12. The large drain in the neighbourhood of the South pier has been diverted through the surf bank, but the rapid rate of accumulation of the sand has choked up the mouth of the diversion. When I get some iron pipes from the Public Works shops it will not be difficult to keep the mouth clear of sand.

Drains

13. The sea continues to encroach along the shore from Mr. Coleman's house to beyond the village of Cassernode, but the encroachments appear to be more attributable to very high tides accompanied by heavy ground swell than to wave action caused by the North pier. The two fresh groynes that I have thrown out at Cassernode have proved very successful and have prevented further erosion in the immediate neighbourhood. The state of the coast is constantly watched and protective measures are still being carried on. - During the past month 1896 tons of large labourers have been used in these protective works, partly in constructing a groyne and partly in protecting the slopes of the road along the beach.

Sea Encroachments North of Harbour works.

Expenditure

14. The total expenditure on the works up to the end of July 1878 is 208,518 Rupees.

Plans & Sections

15. One general plan of the Harbour and two sections accompanying this report. The plan shows clearly the state of the sand around the South pier.

General

16. On the 25th July I received a long telegraphic message from Colonel Sir Andrew Clarke, P. E. at Simla, asking for full particulars of the progress of the work and of the state of the sand. To this I replied first by telegraph, and then by letter with plans and sections accompanying it. - On the 31st I also had inquiries by telegraph from Lieutenant Colonel Thomason, P. E. at Nainital.

17. I learn from Mr. Parker that he is anxious to go thoroughly into the question of the intercepting sewer within Harbour limits, and it is probable that with this object he will visit Madras next January.

I have the honor to be,
Sir,
Your most obedient servant,
J. H. Mowbray,
Superintendent,
Madras Harbour Works.

Pl. 2725 B 47th Nov 1873
G.O. 29th 1874 - 19 July 1876.

Buildings & Roads

From 1: 86:0
The Superintendent-
Madras Harbour Works

No 2212
Dated 1st August 1878

No of Enclosures 3/10

Progress
Submits Report of progress
of the work during the
month of July 1878 -

Co. of 3. 8. 78

Cir. 1. 8. 78. 12. 878

No. 2611

From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

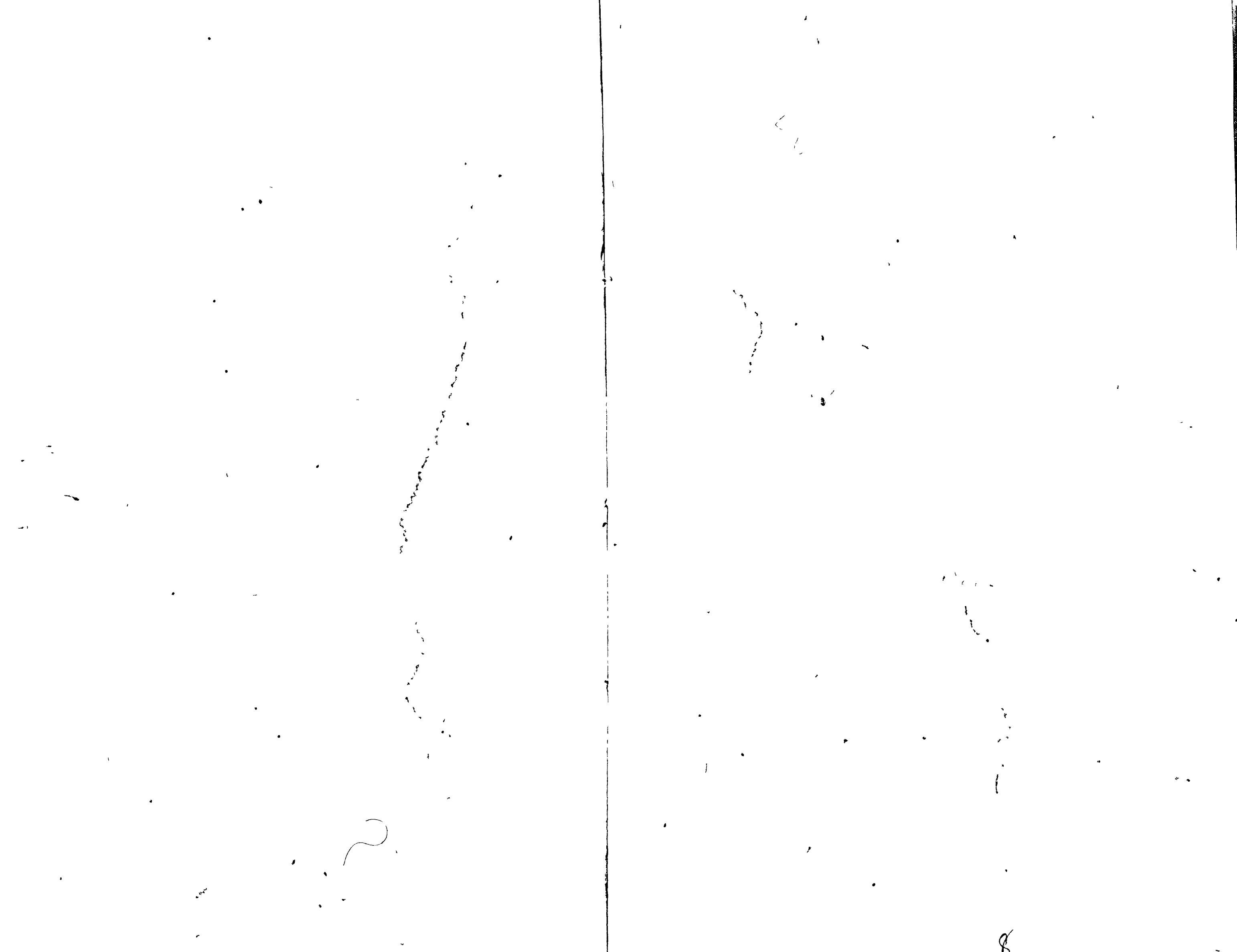
To

Colonel E. A. Ford, R. E.
Secretary to Government, P. W. Dept
Buildings & Roads,
Fort St. George, Madras, 1st August 1878

SIR,

I have the honor to forward copies
of the communications to and from
Sir Andrew Clarke, and Lieutenant
Colonel E. A. Thomason, R. E., called for
in your Memorandum No. 3565, dated
12th Instant. -

I have the honor to be,
Sir
Your most obedient servant,
A. H. Browngood,
Superintendent,
Madras Harbour Works.



Buildings & Roads

Thorn
The Superintendent
Madras Harbour Works

32/4

2611
Dated 11th August 1878

No. of Enclosures 5

Sir Andrew Clarke

Forwarded copies of correspondence to & from - in the condition of the works
Circulated -

Circulated for information with reference to remarks of the members of the Harbour Progress Report for the month of July.

2007
11/8

C.S. 3555 of 12.8.78

11/8

C.S. 3555 of 12.8.78

No. 22

From

THE SUPERINTENDENT
MADRAS HARBOUR WORKS,

To

Colonel Sir Andrew Clarke.
R. G. M. G., G. B., R. G. & Co.
Simla.

MADRAS 31st July 1878

SIR,

I have the honor to acknowledge the receipt of a telegram from you on July 24th from Simla, asking about the state of the sand and the alterations in low water contour line in the neighbourhood of the Madras Harbour. To which I replied by telegraph on the 25th as follows:-

Sand has advanced four hundred and forty feet on south side of South pier. Much is deposited in advance, and to the north of South pier below water. No other material change taken place in low water line. Works have stood perfectly and have twice been tried by heavy seas. I see no reason for altering design of sections. Water

is

is much quieter on lee side of each pier. Length
of North pier 366 feet, South pier 500 feet. Letter
and plans follow. South pier much delayed
by sand in foundations.

2. I now send a plan of the Harbour
as existing at the end of June, and longitudinal
sections of the North and South piers.

3. The sand at the South pier is very
troublesome, and is causing great delay in
block setting, but we have advanced 113 feet
during July by means of dredging away the
sand. There is a considerable amount of
sand between the end of the South pier and
the Iron pier but judging from what
happened at the North pier in 1877 it seems
very probable that much of this will be
washed out, again by the North East mon-
soon seas.

4. At the present date the length
of the North pier is 339½ feet from the
point B where the blockwork commences,
and

and the South pier is 500 feet from the point

E.

3402

5. It seems certain that the South
pier is now going through a similar
obstruction in the way of sand ^{to} that
which caused such trouble at the North
pier from June to November 1877. When we
have once got through this trouble I see
no reason why each pier should not be
pushed on, at a rate of 90 feet per month
throughout the whole year.

I have &c,
(Signed) J. A. Thoroughgood,
Superintendent
M. H. Works.

(A true copy.)

J. A. Thoroughgood
Superintendent,
Madras Harbour Works

Indian Telegraph.

RECEIPT

INSTRUCTIONS (V. 201)

3402

FOR INLAND MESSAGES ONLY

STAMPS must be affixed above the upper portion above the lower portion below the perforation. The upper halves after defacement are returned with the receipt to the sender.

SPACE FOR STAMPS.

A FOREIGN MESSAGE IF WRITTEN ON THIS FORM WILL NOT BE ACCEPTED

STAMPS in any way defaced cannot be received.

No.	Words	Time taken for transmission	By	At	By
110	24	14	10		

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

TO
(Station)

Mo

FROM
(Station)

Linda

(Name)

F. N. Thorwood

FROM
(Person)

Mr. Arthur Clarke

TO
(Address)

Supt. Harlow Works

OFFICIAL INSTRUCTIONS.

PLACE OF MESSAGE (STATE OR PRIVATE)

1 will	2 you	3 kindly
4 tell	5 me	6 if
7 since	8 I	9 was
10 over	11 your	12 works
13 every	14 material	15 change
16 has	17 taken	18 place
19 in	20 the	21 shore
22 line	23 of	24 low
25 winter	26 either	27 within
28 or	29 without	30 the

SENDER'S SIGNATURE AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY.

* If not marked State will be classed as Private and no alteration can afterwards be made.

(F. 153) - Govt. Tel. Press - No. 200, - 14-6-77, - 1900000.

14-6-77, - 1900000.

- I.—The accuracy of messages is not guaranteed and the Sender and Receiver must assume all risks arising from a delay or error or delay.
- II.—All Offices except those of the 1st class, will be closed to the public between the hours of 8 A.M. and 1 P.M. on Sunday and Public Day New Year's Day.
- III.—Messages are not sent on the 1st of January and the 1st of February.
- IV.—No message is sent on the 1st of January and the 1st of February.
- V.—The rate of charges for messages is as follows:—
- VI.—The rate of charges for messages is as follows:—
- VII.—The rate of charges for messages is as follows:—
- VIII.—The rate of charges for messages is as follows:—
- IX.—The rate of charges for messages is as follows:—
- X.—The rate of charges for messages is as follows:—
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- XVIII.—The rate of charges for messages is as follows:—
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- XXVI.—The rate of charges for messages is as follows:—
- XXVII.—The rate of charges for messages is as follows:—
- XXVIII.—The rate of charges for messages is as follows:—
- XXIX.—The rate of charges for messages is as follows:—
- XXX.—The rate of charges for messages is as follows:—

MESSAGE, continued

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SENDER'S SIGNATURE AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

TRAFFIC CODE FORM A.

Indian Telegraph.

No.

RECEIPT

10 (Station)

INSTRUCTIONS (if any)

3402

FOR INLAND MESSAGES ONLY.

SPACE FOR STAMPS.

STAMPS must be affixed whole the upper portion above the lower portion below the perforation. The upper halves, after defacement, are returned with the receipt to the Sender.

A FOREIGN MESSAGE IF WRITTEN ON THIS FORM WILL NOT BE ACCEPTED.

STAMPS in any way defaced cannot be received.

Class	No.	Words	Time tendered for transmission (Maximum time)	Sent to
Day	H	M	At	By

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

TO (Station)

FROM (Station)

TO (Name)

FROM (Person)

TO (Address)

OFFICIAL INSTRUCTIONS.—

CLASS OF MESSAGE (STATE OR PRIVATE)

1	2	3
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25	26	27
28	29	30

SENDER'S SIGNATURE AND ADDRESS (NOT SIGNALLED)

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY. TELEGRAPH MASTER

If not marked State will be classed as Private and no alteration can afterwards be made. (P. 134) — Govt. Tel. Press, No. 269, — 14-4-77, — 170 0000.

- I.—The sender of a message must accept all risks arising from any delivery errors or omissions.
- II.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
- III.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
- IV.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
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- XXVII.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
- XXVIII.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
- XXIX.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.
- XXX.—The sender must ensure that the message is correctly transcribed and that the words are correctly spaced and punctuated.

MESSAGE—continued

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SENDER'S SIGNATURE
AND ADDRESS (NOT SIGNALLED)

Indian Telegraph.

RECEIPT.

No. 3402

TO (Station) Simla

STAMPS must be affixed where the upper portion above the lower portion below the perforation. The upper halves after defacement, are returned with the receipt to the Sender.

SPACE FOR STAMPS.

For INLAND MESSAGES ONLY

STAMPS in any way defaced cannot be received.

A FOREIGN MESSAGE IF WRITTEN ON THIS FORM WILL NOT BE ACCEPTED.

TO (Name) Mr. Andrew Clarke

TO (Address) Simla

FROM (Station) Madras

FROM (Person) Morongood

OFFICIAL INSTRUCTIONS—

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

CASE OF MESSAGE (STATE OR PRIVATE)

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30

Sender's Signature and Address (Not Signalled)

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY. TELEGRAPH MASTER

If not marked State will be classed as Private and no alteration can afterwards be made.

(F. 153) — Govt. Gen. Press, No. 200, — 1-77, — 106 0000.

[illegible]

MESSAGE,—continued.

change	taken	place
low	low	water
line	Wife	Rare
stood	perfectly	and
leave	twice	been
tried	by	heavy
sea	by	see
up	reason	for
altering	design	of
action	water	is
much	quicker	on
lie	side	of
each	pier	Length
off	cloth	pier
sight	hundred	most
likely	size	just

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

Y. L. Lee, Chm.

A. H. Thompson
TELEGRAPH MASTER
New York City N.Y.

TRAFFIC CODE FORM A

Indian Telegraph.

RECEIPT.

TO (Station)

INSTRUCTIONS (if any)

No.

3402

10

STAMPS must be affixed above the upper portion above the lower portion below the perforation

The upper halves after detachment, are returned with the receipt to the Sender

SPACE FOR STAMPS.

FOR INLAND MESSAGES ONLY

A FOREIGN MESSAGE IF WRITTEN ON THIS FORM WILL NOT BE ACCEPTED.

STAMPS in any way defaced cannot be received.

Class

No.

Words

Time taken for transmission
(Maximum time)

Day	H.	M.
-----	----	----

Sent to

At

By

(L. S.)

Mr. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q. R. S. T. U. V. W. X. Y. Z.

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

TO (Station)

(Name)

(Address)

FROM (Station)

FROM (Person)

OFFICIAL INSTRUCTIONS.—

CLASS OF MESSAGE (STATE OR PRIVATE) *

South	pier	five
hundred	Letter	and
plans	follow	South
pier	much	delayed
by	sand	in
foundations	20	21
22	23	24
25	26	27
28	29	30

A true copy

SENDER'S SIGNATURE AND ADDRESS (NOT SIGNALLED) {

TELEGRAPH MASTER

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY.

* If not marked State will be classed as Private and no alteration can afterwards be made.

(P. 108) — Govt. Tel. Press, — No. 260, — 14-5-77, — 100 0000.

* If not marked *State* will be classed
(P. 102) — Gov. Tel. Form, — No. 260, — 14-8-77, — 1000000.

- I.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- II.—All messages except those of the first class will be closed to transmission between the hours of 8 A. M. and 4 P. M. (Local Time) on Sunday and Public Holidays.
- III.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- IV.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- V.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- VI.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- VII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- VIII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- IX.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- X.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XI.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XIII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XIV.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XV.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XVI.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XVII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XVIII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XIX.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XX.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXI.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXIII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXIV.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXV.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXVI.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXVII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXVIII.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXIX.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.
- XXX.—The sender of messages is not present at the end of the line and Receiver must accept all risks arising from non delivery errors or delay.

MESSAGE,—continued

31	32	33
34	35	36
37	38	39
40	41	42
43	44	45
46	47	48
49	50	51
52	53	54
55	56	57
58	59	60
61	62	63
64	65	66
67	68	69
70	71	72
73	74	75
76	77	78

SENDER'S SIGNATURE
AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

Indian Telegraph.

No.

RECEIPT

TO (BY TELEGRAPH)

IS. RECEIVED (BY UNIT)

3402
11

FOR INLAND MESSAGES ONLY

SPACE FOR STAMPS.

STAMPS must be affixed under the proper portion above the letter portion below the sender's name. The letter portion after defacement, is returned with the receipt to the sender.

A FOREIGN MESSAGE IS NOT ACCEPTED ON THIS FORM WILL NOT BE

STAMPS in any way defaced cannot be returned.

Class	No.	Words	Time taken for transmission	Minutes	Seconds	Rate	Amount
1	15	15	30	16	-		

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

TO (Name) *Mr*

FROM (Station) *Mainital*

TO (Address) *Supt Harbor Works*

FROM (Person) *Leol Thomson*

OFFICIAL INSTRUCTIONS.—

CLASS OF MESSAGE (STATE OR PRIVATE)	1	2	3
<i>Please</i>	<i>telegraph</i>	<i>progress</i>	
<i>works</i>	<i>and</i>	<i>and</i>	
4	5	6	
7	8	9	
10	11	12	
13	14	15	
16	17	18	
19	20	21	
22	23	24	
25	26	27	
28	29	30	

SENDER'S SIGNATURE AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY.

If not marked State will be classed as Private and no alteration can afterwards be made.

(P. 163) — Govt. Tel. Press, — No. 250, — 14-6-77, — 1000000.

- I.—The delivery of messages is not guaranteed, and the Sender must accept all risks arising from non-delivery, errors or delays.
- II.—An undue delay in the delivery of a message will be charged to the Sender at the rate of 50 cents per word for every hour or part of an hour.
- III.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- IV.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- V.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- VI.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- VII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- VIII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- IX.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- X.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XI.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
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- XIII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XIV.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XV.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XVI.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XVII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XVIII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XIX.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XX.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXI.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXIII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXIV.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXV.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXVI.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXVII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXVIII.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXIX.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.
- XXX.—No charge is made for the transmission of a message by day or night, or for the use of a day or night rate.

MESSAGE, continued

31		38
32		39
33		40
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35		42
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68		75
69		76
70		77
71		78
72		79
73		80

SENDER'S SIGNATURE
AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

TRAFFIC CODE FORM A

Indian Telegraph.

RECEIPT

No.

3402

INSTRUCTIONS (if any)

FOR INLAND MESSAGES ONLY

SPACE FOR STAMPS.

STAMPS in any way defaced cannot be received.

A FOREIGN MESSAGE IF WAITING ON THIS FORM WILL NOT BE ACCEPTED.

Day	H.	M.	At	By
31	13	48		

NOTHING TO BE WRITTEN BY THE SENDER ABOVE THIS.

TO (Station) *Amrital*

FROM (Station) *Mudras*

TO (Address) *Amrital*

FROM (Person) *Therowgood*

OFFICIAL INSTRUCTIONS—

CLASS OF MESSAGE (STATE OR PRIVATE)

North	five	eight
hundred	eighty	nine
feet	from	Point
B	South	Per
five	hundred	from
Point	6	Land
at	South	five
very	troublesome	on
all	sides	have
telegraphed	state	of

SENDER'S SIGNATURE
AND ADDRESS (NOT SIGNALLED)

TELEGRAPH MASTER

MESSAGE TO BE CONTINUED ON THE BACK, IF NECESSARY.

If not marked State will be classed as Private and no alteration can afterwards be made.

(P. 103) — Govt. Tel. Press, No. 280, — 14-3-77, — 10-3-93A.

137
1/10/80

No 3402 W Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT

Under date the 26 July 78 Aug?

Read the following, —

From the Supt, Madras Harbour Works (H & Co 22 W 78 Aug 78)
Do. Do. — (— 26 W 78 14 do)

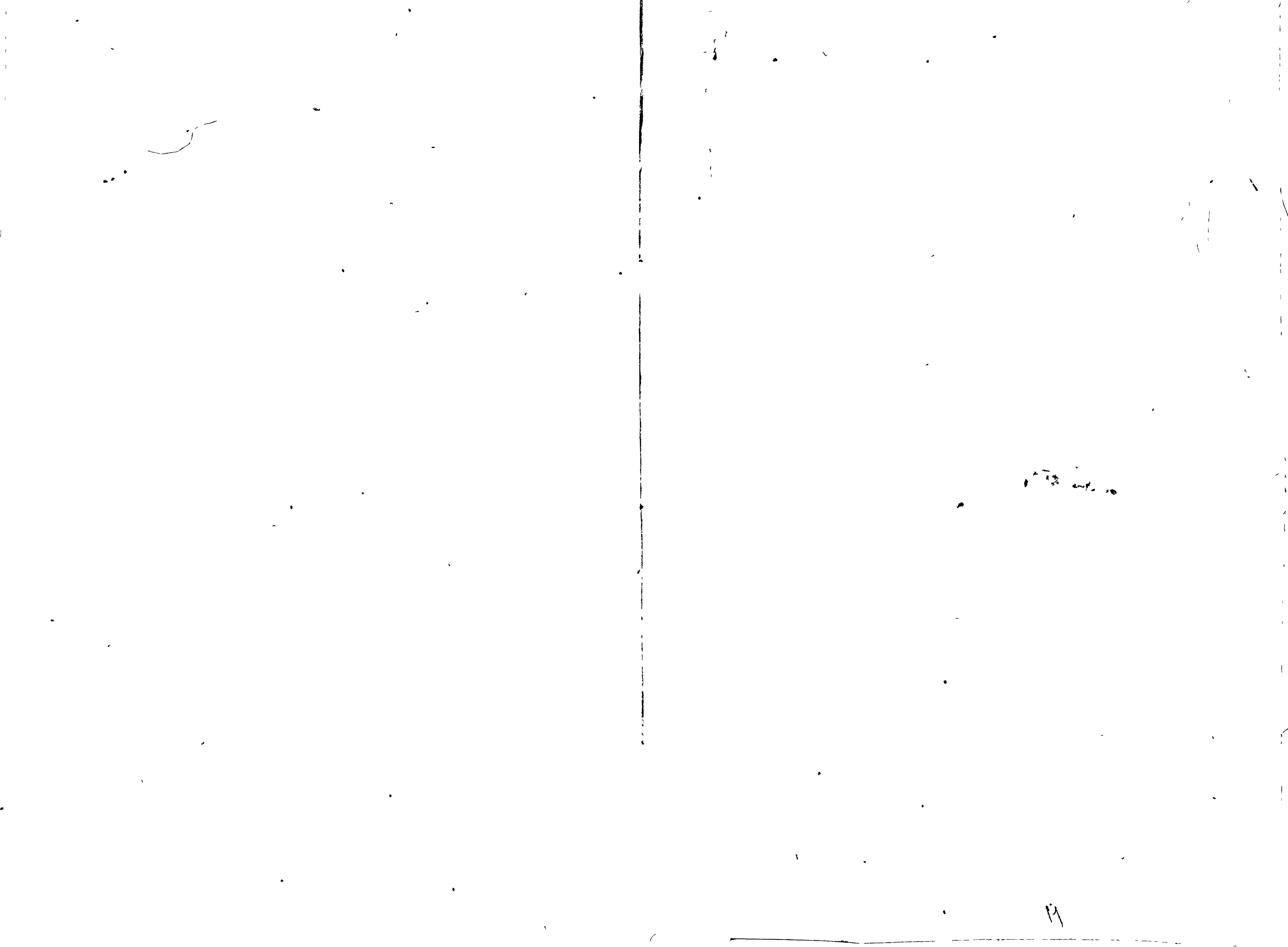
3402
Recorded.

All such communications as those referred to in the letter from the Superintendent of the Harbour Works No 261 W dated 12th Aug. 1878, should be laid before Government as a matter of course

927
26/8

Supt. of H. Works
Encl. 261 W
R. J. 26-9-78

5-8-78. 212 12 8. 78
8. 78



60
9/11
1873
PUBLIC WORKS

Sept 11/73
W. H. H. H. H.
300

26 Aug 1873 No 2402 H

30/9
Nos. 275 to 295

Madras Harbour works
The monthly report of the for July
all communications
with Col Sir Andrew
Clarke regarding the
order to be laid before
Government

John H. H.