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Archives I - 10,006—16-8 77.

(1) Number of pages 30
(2) Date of repair 14.10.86
(3) Initials of the Referencer las.

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Publicworks DEPARTMENT

G.O. No.
B.P. No. 4466 W
Press.
Mis.

Dated 23-11-1878 ~~197~~.

S.G.M.

Not to be folded or roughly handled

4466
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

23rd November 1878, No. 4,466 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 262. Endorsement of the Acting Chief Secretary, dated Ootacamund, 21st October 1878, No. 1,959.

From L. R. BURROWS, Esq., President, Municipal Commission, Madras, to the Acting Chief Secretary to Government, dated Madras, 18th October 1878, E No. 1,358.

I HAVE the honor to bring to the notice of Government that the sea is still making encroachments at Royapooram. The Government have directed in their Order of the 3rd August 1878, No. 3,122 W, in the Public Works Department, that a 30 feet road should be maintained along the wall of Mr. Coleman's compound. The sea was reported to be within three feet of the wall on the 15th instant.

2. About 100 huts in the Royapooram Fishermen's Coopum have been washed away.

TRANSFERRED to the Public Works Department for disposal.

(Signed) C. G. MASTER,
Acting Chief Secretary.

No. 4,901.

REFERRED to the Superintendent of the Madras Harbour Works for report as to what has been done, and what is proposed. An early reply is requested.

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

29th October 1878.

No. 262-A. From F. N. THOROWGOOD, Esq., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 31st October 1878, No. 42 W.

I HAVE the honor to acknowledge the receipt of your endorsement, No. 4,901, of the 29th instant, upon letter, No. 1,358, of the 18th instant, from the President of the Municipal Commission, to the Acting Chief Secretary to Government, in which the President reports the serious encroachment of the sea to the north of these works.

2. I lose no time in reporting briefly what has been done, and I will shortly submit a survey, now being carried out with much difficulty, of the portions of the beach where the sea has encroached most heavily. With the aid of this survey I shall be able to point out more in detail what has been done.

3. I would ask that it may be borne in mind that my chief object being to push on the construction of the Harbour Piers I have only supplied so much laterite to the protective works as could be spared without delaying the work at the north pier seriously.

4. Two new groynes have been thrown out to the north of the previously existing groynes, and four others would have been made further northward, but the encroachments near Mr. Coleman's house became on a sudden so serious that all the force was transferred to this portion of the beach.

5. Six new groynes have been constructed altogether, and banks of laterite boulders are being thrown out parallel to the shore, joining one groyne with another, so as to form a width for the 30 feet roadway.

6. The encroachments have lately been so rapid that no work that I have been able to do has been of much use. To prevent further serious encroachments nothing will serve but a good retaining wall or revetment which would in itself form a work of considerable magnitude.

7. The letter of the President of the Municipal Commission is herewith returned as requested.

No. 262-B. From the same Officer, dated Madras, 14th November 1878, No. 44 W.

I HAVE the honor to submit a further report in continuation of my letter, No. 42 W, of the 31st October 1878, on the encroachment of the sea to the north of these works and the measures taken to prevent it.

2. The accompanying special survey of the coast on a scale of 100 feet to 1 inch will show all the encroachments and all the protective works.

3. The line of high water in February 1876 is shown by one thin black line from groyne No. 1 nearest to the north pier to the fishing village at the extreme left of the tracing. This was approximately the contour line of the high water mark at the commencement of these works.

4. The line of high water at the end of October 1878 is marked with a blue tinted border throughout its whole length. The yellow dotted line shown in places marks the high water line in July 1878.

5. Previous to the receipt of G.O., No. 984, of February 28th, 1878, in which six groynes were ordered to be constructed to the north of groyne No. 6, protective works had been carried on where they appeared to be necessary, but nothing had been required further north than this groyne No. 6. In June 1878, however, erosion began to take place opposite the "Coccanut Tope" shown on the plan.

6. As this erosion appeared to be growing serious I threw out the groynes (shown in red) A and B. These caught a large quantity of sand on their south sides. The encroachment now (early in July) began to be conspicuous at the "fishing village" shown at the extreme left of the plan, and I was about to construct more groynes to the northward when more serious and sudden encroachments took place nearer to the north pier, namely near the Police Tannah at the land end of groyne No. 5. To this part then I directed all the laterite supplies that could be spared from the Harbour Works.

7. On July 2nd Major Ross Thompson visited the beach, and the result of his report on the erosion was G.O., No. 3,122 W, of August 3rd, 1878. After receiving this order groynes C, D, and E were thrown out as quickly as possible, but with little effect.

8. I now came to the conclusion that groynes were useless, as the sea was outflanking them as fast as they were made, and although the groynes A and B in September were completely cut off by the sea I judged it better to keep on working at the encroachment nearer to Royapooram.

9. Consequently I commenced a rough laterite bank made of the largest boulders from Ambathoor thrown in parallel to the shore from groyne No. 3 towards groyne No. 4. At first this appeared to have no effect, the boulders disappearing as fast as they were thrown in, but at last they began to remain steady and the sea ceased to cut the shore away.

10. Since that time all the protective work has been confined to carrying out this rough revetment which extends from 120 feet to the north of groyne No. 2 as far as the Police Tannah at the end of groyne No. 5.

11. The very bad state of the roads renders it a rather difficult business to carry large laterite boulders from the Harbour Works to the groynes. And as there is a constant run of traffic over the Harbour Works lines it is hard to unload 10 or 15 railway wagons into native "bandies" without interfering with the work of constructing the piers. For these reasons I have been unable to keep pace with the encroachment of the sea in the more northen portion of the beach at a distance of 4,800 feet from the spot where the railway wagons have to be unloaded. Consequently the erosion at the fishing village north of the saw mills has been very severe. The amount of laterite used in these protective works since June is about 7,570 tons.

12. With regard to what should be done in future it is hard to propose anything without knowing exactly what amount of erosion may be allowed to occur independently of protective works. In the length of shore from the groyne A to the north pier it seems probable that no additional groynes will be of any service, and to construct even a rough retaining wall for that distance would be a heavy and costly undertaking and one that would delay the Harbour Works considerably. Moreover, it is probable, but by no means certain, that as the north pier advances eastward the erosion will extend northward and protective works will become more costly in proportion to the greater distance over which the laterite has to be hauled.

13. Since the 8th November when the southerly current (*i.e.* to the south) became confirmed no erosion has occurred, but the shore is gradually recovering its former shape. Probably no more erosion will occur until next April, by which time the shore opposite Mr. Coleman's house will have been thoroughly repaired, and two or three long groynes can be thrown out to the north of groyne A, which will be sure to catch a certain amount of sand on their southern sides during the south-west monsoon.

14. The whole question of the erosion and protection against it I think might be referred to Mr. Parkes on his arrival in Madrss, as he is quite prepared for such results from the action of the sea. In the mean time I believe that by extending the retaining wall further serious damage can be stopped.

15. I only trust that what has been done since June is not disapproved by His Grace the Governor in Council on account of its seeming so insufficient, my chief object having been to use only so much material as could with difficulty be spared without delaying the construction of the north pier.

No. 262-C. *Note by the Chief Engineer, P.W.D.*

THE Chief Engineer concurs in Mr. Thorowgood's proposal that the general question of the best means to meet the encroachment on the Royapooram beach had better stand over till Mr. Parkes arrives next year. It will be observed from the 13th paragraph of Mr. Thorowgood's letter that no erosion has occurred since the 8th instant when the southerly current became confirmed. The Superintendent's belief that till April next no further erosion will occur is shared by the Chief Engineer. By that time the great advance seaward of both the harbour groynes will probably shift the site of the encroachment much further to the north. The beach was visited by the Chief Engineer on the 8th instant.

(Signed) E. A. FOORD, Colonel, R.E.,
Chief Engineer, P.W.D.

15th November 1878.

No. 263. ORDER THEREON, 23rd November 1878, No. 4,466 W.

As it seems likely that the mischief is for the present suspended, and the beach may be expected to reform to some extent, the arrival of Mr. Parkes will be awaited. But in anticipation, material for the retaining wall may be collected on the spot.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
,, Financial Department.

Exd. C. Howarth.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1878} Madras

PUBLIC WORKS.

To

THE SUPERINTENDENT, MADRAS
HARBOUR WORKS,
&c., &c., &c.

Dated November 23rd.

Issued

Recd. *Encl.*

G. O., 23rd November 1878, No. 4,466 W.

NOVEMBER.

Nos. 262-263.

MADRAS HARBOUR.

Sea encroachments.

P1

Madras Municipality,

E. No. 1358

EXECUTIVE ENGINEER'S DEPARTMENT,
Madras, 18th October 1878.

4466/3

From

L. R. BURROWS, Esq.,
~~*Acting*~~ *President Municipal Commission,*

To

C. G. Master Esqre.
Ag Chief Secretary to Government
Ootacamund.

SIR,

I have the honor to bring to the notice of Government that the Sea is still making encroachments at Royapuram. The Government have directed in their order of the 3rd August 1878 No. 3122 W in the Public Works Department that a 30 feet road should be maintained along the wall of Mr. Coleman's Compound. The sea was reported to be within 3 feet of the wall on the 15th Instant.

2. About 100 huts in the Royapuram Fishermen's Cooppum have been washed away.

I have the honor to be
Sir,
Your most Obedt. Servant
L. R. Burrows
President, Munl. Comn.

No 1959.

P.W.

SW 12381/7

MADRAS HARBOUR WORKS OCT 31 1878

Transferred to the Public Works Department for disposal.

Ootacamund
21 October/78.
to the Public Works Department.

Clumbers
Ag Chief Secretary

Marine 1878 Department
Encroachments
[illegible] of the Sea
The President
Municipal Commrs
Madras.
To The Acting Chief Secretary
to Government
Ootacamund
Dated 18th Octr 1878
Despatched 19th "
Recd — 23 —
No 1358 W. 4207.

Reports the encroachment of the sea at Rayapooram and the number of huts that have been washed away in the Cooppum.

transferred

G.O. 3122 W. 3-8-78.
— 3402 W. 26-8-78.
— 3607 W. 11-9-78

No 4901

Referred to the Supt. of the Madras Harbour Works for report as to what has been done, and what is proposed. An early reply is requested.

(By order)
E A Ford Col R.E.
Secy to Govt. P.W. Dept

29th Octr 1878.

Cir 23-10-78 Retd 29-10-78
P.L. Sheet 30 Oct

Supdt. M. H. Works in original to be returned -

No. 42 W.

1966

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, 31st October 1878.

Inclosure one

SIR,

I have the honor to acknowledge the receipt of your endorsement No 4901 of the 29th instant, upon letter No 1358 of the 18th instant from the President of the Municipal Commission, to the Acting Chief Secretary to Government, in which the President reports the serious encroachment of the sea to the north of these works. —

2. I lose no time in reporting briefly what has been done, and I will shortly submit a survey, now being carried out with much difficulty, of the portions of the beach where the sea has encroached most heavily. With the aid of this survey, I

I shall be able to point out more in detail what has been done.—

3. I would ask that it may be borne in mind that my chief object being to push on the construction of the Harbour Piers, I have only supplied so much laterite to the protective works as could be spared without delaying the work at the North pier seriously.—

4. Two new groynes have been thrown out to the North of the previously existing groynes, and four others would have been made further northward, but the encroachments near Mr Coleman's house became on a sudden so serious that all the force was transferred to this portion of the beach.—

5 Six new groynes have been constructed altogether, and banks of laterite boulders are being thrown out parallel to the shore, joining one groyne with another, so as to form a width for the 30 feet roadway

6. The encroachments have lately been so rapid, that no work that I have been able to do has been of much use.— To prevent further serious encroachments nothing will serve but a good retaining wall or revetment which would in itself form a work of considerable magnitude.—

7. The letter of the President of the Municipal Commission is herewith returned as requested.—

I have the honor to be,
Sir,
Your most Obedient Servant
F. N. Harrowgood.
Superintendent
M. H. Works

12381

Buildings & Roads

From
The Superintendent
Madras Harbour Works

D. corresp: vide enclosr.

No. 42 W

Dated 31st October 1878
Recd. 2d Novr. P. 30 pen.
Registered.

No. of Enclosures 1

Sea Encroachment

Submits report as to what has been done to the encroachment of the sea at Cassimode and proposes construction of a retaining wall.

Ans 6-11-78. RB 11-78

No. 44 W

P 6

From

The Superintendent,
Madras Harbour Works,

4966/6.

To
Colonel E. A. Foord R. E.
Secretary to Government P. W. Deptt:
Buildings & Roads
Fort Saint George

Madras, 14 November 1878.

Sir,

Enclosure 1

I have the honor to submit a further report in continuation of my letter No. 42 W of the 31st October 1878, on the encroachment of the sea to the North of these works and the measures taken to prevent it.—

2. The accompanying special survey of the coast, on a scale of 100 feet to 1 inch will shew all the encroachments and all the protective works.

3. The line of High water in February 1876 is shewn by one thin black line from groyne No. 1 nearest to the North pier to the fishing village at the extreme left of the tracing. This was approximately the contour line of the High water mark at the commencement of these works.—

The

4. The line of High water at the end of October 1878 is marked with a blue tinted border throughout its whole length. The yellow dotted line shewn in places marks the High Water line in July 1878.-

5. Previous to the receipt of G.O. No. 984 of February 28th 1878 in which six groynes were ordered to be constructed to the North of groyne No. 6, protective works had been carried on where they appeared to be necessary, but nothing had been required further North than this groyne No. 6.- In June 1878 however erosion began to take place opposite the "Cocoanut Tope" shewn on the plan.-

6. As this erosion appeared to be growing serious I threw out the groynes (shewn in red) A and B- These caught a large quantity of sand on their South sides. The encroachment now (early in July) began to be conspicuous at the "Fishing Village" shewn at the extreme left of the plan and

I

87

4466/7

I was about to construct more groynes to the northward, when more serious and sudden encroachments took place nearer to the North Pier. Namely near the Police Thannah at the land end of groyne No. 5. To this part then I directed all the laterite supplies that could be spared from the Harbour Works.-

7. On July 2nd Major Ross-Thompson visited the beach and the result of his report on the erosion was G.O. No. 3122 W. of August 3rd 1878. After receiving this order groynes C. D. and E. were thrown out as quickly as possible, but with little effect.-

8. I now came to the conclusion that groynes were useless, as the sea was out-flanking them as fast as they were made and although the groynes A and B in September were completely cut off by the sea, I judged it better to keep on working at the encroachment nearer to Royapooram.

9. Consequently I commenced a

rough

rough laterite bank made of the largest boulders from Ambattoor thrown in parallel to the shore from groyne No. 3 towards groyne No. 4. At first this appeared to have no effect, the boulders disappearing as fast as they were thrown in, but at last they began to remain steady and the sea ceased to cut the shore away.

10. Since that time all the protective work has been confined to carrying out this rough revetment which extends from 120 feet to the north of groyne No. 2 as far as the Police Thannah at the end of groyne No. 5.-

11. The very bad state of the roads renders it a rather difficult business to carry large laterite boulders from the Harbour Works to the groynes. And as there is a constant run of traffic over the Harbour Works lines it is hard to unload 10 or 15 railway wagons into native "bandies"

without

without interfering with the work of constructing the piers. For these reasons I have been unable to keep pace with the encroachment of the sea in the more northern portion of the beach at a distance of 4800 feet from the spot where the railway wagons have to be unloaded. Consequently the erosion at the Fishing village north of the saw mills has been very severe. The amount of laterite used in these protective works since June is about 7570 tons.-

12. With regard to what should be done in future it is hard to propose anything without knowing exactly what amount of erosion may be allowed to occur independently of protective works. In the length of shore from the groyne 4 to the North pier, it seems probable that no additional groynes will be of any service, and to construct even a rough retaining wall for that distance would be a heavy and costly undertaking and one that

would

would delay the Harbour Works considerably.— Moreover it is probable, but by no means certain, that as the North pier advances eastward the erosion will extend northward and protective works will become more costly in proportion to the greater distance over which the laterite has to be hauled.

13. Since the 8th November when the Southerly current (i.e. to the South) became confirmed no erosion has occurred, but the shore is gradually recovering its former shape. Probably no more erosion will occur until next April, by which time the shore opposite Mr Coleman's house will have been thoroughly repaired, and two or three long groynes can be thrown out to the North of groyne A, which will be sure to catch a certain amount of sand on their southern sides during the S. W. monsoon.—

14. The whole question of the erosion

and

89 4466/71

and protection against it I think might be referred to Mr Parkes on his arrival in Madras, as he is quite prepared for such results from the action of the sea. In the meantime I believe that by extending the retaining wall further serious damage can be stopped.—

15. I only trust that what has been done since June is not disapproved by His Grace the Governor in Council, on account of its seeming so insufficient, my chief object having been to use only so much material as could with difficulty be spared without delaying the construction of the North Pier.—

I have the honor to be,
Sir,
Your most Obedient Servt.

J. H. Thorowgood.
Superintendent
Madras Harbour Works

1285

Buildings & Roads

From
The Superintendent
Madras Harbour Works

No. 44 W
Dated 14th November 18

No. of Enclosures 1 Plan

Sea Encroachments

Submits observations on the state of the currents and encroachments of the sea.

P.W.D.

Note.

4966/10

The Chief Engineer concurs in Mr. Thorowgood's proposal that the general question of the best means to meet the encroachment on the Royapooram beach had better stand over till Mr. Parkes arrives next year. It will be observed from the 13th paragraph of Mr. Thorowgood's letter that no erosion has occurred since the 8th instant when the southerly current became confirmed. The Superintendent's belief that till April next no further erosion will occur is

N.S.P. 15/11

shared by the Chief Engr. By that time the great advance seaward of both the harbour groynes will probably shift the site of the encroachment much further to the North. The beach was visited by the Chief Engr on the 8th instant.

E A Wood Col. R.E.
Chief Engr P.W.D.

5th Novr 1878.

Ex. Ed. A. [illegible] 16-11-78

Public Works Dept

4466
11

Letter from the Superintendent Madras Harbour Works No. 42 W dated 31st October 1878.

For orders.

It is remarked that the Superintendent of the Madras Harbour Works appears to be doing all that is possible, with due regard to the progress of the Harbour Works. Now that the current seems to be setting steadily from the North, it is very possible that the encroachment will cease

Gen:

We must await the further report & the result of the Ch: Engr's inspection.

6/11

cease as the sand is deposited in the re entering angle formed by the beach and the Northern Pier. The Chief Engineer will inspect the site as early as practicable ~~to~~ & report further with reference to the advisability of constructing a retaining wall or otherwise

E A[illegible] Coll R.E.

Chf Engr & Secy to L G (P W D)

4466
12

(2) Hon. Sir W. Robinson K.C.S.I.

(1) Hon. W. Hudleston

Dis

G.O. No 4466 W - 23-11-78

Seen M.P. 2/11

Cr 5-11-78. R 15-11-78 Circ 16-11-78.

PUBLIC WORKS DEPARTMENT.

4466/13

Letter from the Supdt. Madras Harbour Works No. 44 W dated 14th November 1878.

Note by the Chief Engineer P.W.D. dated 15th November 1878.

FOR ORDERS.

E.A. Wood Col. R.E.
Secy. to Govt. P.W.D.

Nov. 1878.

I think the mischief is too far advanced for the present & probable breach will occur to some extent. It may perhaps be to the advantage to wait for Mr. Parkes' visit. But I sh'd be disposed to collect material at the spot in anticipation.

W.H.

R.C. 20/11

W.H. 15/11

E.A.W.

FOR ORDERS.

[illegible]

B&R
Irrih

No. 4466 W Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 23rd Novr./78.

Read the following :—

4466/14

11

From

3 The Supt. M. H. Works (H. E. No. 44. W. d/ 14th Novr/78)
4 —— Chief Engineer (H. E. d/ 15 Novr. 78)
2 —— Supt. M. H. Works (H. E. No. 42. W. d/ 31st Octr. 1878)
1 Endt. in the Finl. Dept. (H. E. No. 1959. d/ 21st Oct. 1878)

As it seems likely that the mischief is for the present suspended, and the beach may be expected to reform to some extent, the arrival of Mr Parkes will be awaited. But in anticipation, ~~of his arrival~~ material for the ~~revet.~~ retaining ~~revet.~~ wall may be collected on the spot. WH

21.11.78.

Supt. M. H. Works
Finl. Department
fr auth

21/11

~~Despd. 4—12—78~~

Ch 12854

Govt. of (1878) Madras.

PUBLIC WORKS

25-11-78

Dated

Issued

Recd. Encl.

G. O., 25 Nov 1878, No. 4466 W

Nos. 262 & 263

Madras Harbour

Sea Encroachments