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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works.

DEPARTMENT

G.O. No.	4642	W.	Press.
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Dated	6.12.1878		197.

Not to be folded or roughly handled

4642
1

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

6th December 1878, No. 4,642 W.

Buildings and Roads.

Civil Works.

Read the following paper:—

Proceedings of the Madras Government in the Marine Department, dated
23rd November 1878, No. 599.

Note by His Grace the Governor, dated Salem, 16th November 1878.

NEGAPATAM.

I VISITED this port because I have felt great doubts as to the sufficiency of measures proposed for its improvement, and because I had learnt that very little progress had been made in the necessary repairs of the jetty.

I walked along the jetty wall, then went up the creek above the town in a boat, landed while returning on the sandspit between creek and sea, and then landed near the railway wharf and inspected the site of the suggested battery, whence a good view is obtained of the port, &c.

I am not satisfied that the proposed measures as planned are politic, or have been based on sufficient knowledge.

The port is a creek parallel with the coast from which it is separated by a narrow sandspit, covered with a growth of shrubs, &c., protected from erosion on the inside by nanal grass and some groynes of palmyrahs filled with brushwood; the mouth to the sea has been guided by a jetty of brick faced with stone, beyond which was an extension (it is said of 100 feet) that has been destroyed, two large blocks lying displaced off the end of original jetty. The creek leads to a large shallow lagoon or basin extending inland, one arm being formed into a large canal. The channel across the bar can only be kept open by mechanical power or by the natural scour of the water accumulated in the lagoon at each tide. The power of the scour of the water depends on its quantity and its proper direction on to the bar; the latter point has been kept in view, and the measures suggested are mainly directed to that point; and with the aim of increasing the force of the current are planned to still further narrow the width of the mouth. The rise and fall of the tide is stated to be only 20 inches equal about 3.3 per hour.

This may, however, not be correct, as the tidal oscillation is measured within the bar-inside the creek mouth, and the supply of the lagoon and its scouring action depend on land drainage, and the inflow from the sea. It is probable that the sectional area of the creek-mouth is already too narrow. The current is stated to set strongly inwards for about an hour after H. W. This indicates apparently that the lagoon is never filled to more than 17, instead of 20 inches, and if that be the case, then a large scouring force is lost, and a further contraction of the creek-mouth may result in still further limiting the entrance of water until the lagoon becomes dry and the port closed.

It seems essential before any cost is incurred that the following facts should be laid before Government, and that the Chief Engineer should state his views thereon:—

(1st) the actual tidal oscillation on the coast;

- (2nd) the actual level to which the lagoon fills as ascertained by accurate observation from one and the same observed datum at the canal mouth, at railway bridge and some convenient spot 3 or 4 miles up canal;
- (3rd) the duration of inward current in the creek after H. W.;
- (4th) the sectional area of mouth necessary to allow lagoon to fill equally with the rise of tide in the sea;
- (5th) the sectional area of mouth necessary to allow free passage, to land waters in high floods without danger of causing breach of sandspit or inundation of town.

All these points may have been examined into, but nothing could be learnt respecting them on the spot. While the facts are being supplied, care should be taken to protect the creek from further accumulations of silt or injury.

Encroachments on the ancient channel have been permitted apparently without much foresight, and others have been allowed to occur from want of attention. It is important that a few simple rules be laid down—

- (1) prohibiting any timber, or other material, being laid below H. W. mark, for temporary purposes;
- (2) regulating the mooring of boats in proper places, so as not to interfere with the tidal flow through the channel;
- (3) enforcing prompt removal of sunken or broken boats, &c.;
- (4) prohibiting throwing any rubbish or soil on the shore within certain limits; and that power be given to Master Attendant or to some other suitable officer to enforce these rules.

With reference to the work of repairing the jetty, the progress is little, but the work doing is well done; indeed, almost too well done, for the purpose. The explanation afforded as to the insufficiency of the first estimate was unsatisfactory. It was doubtless a guess, for no details were furnished, and the District Engineer had apparently written one thing when he meant another, as the estimate which he submitted was for "coping," whereas the work was "facing." Such want of care ought not to occur.

The expense of placing a layer of cement concrete on the top of wall is not required; a coating of sand and metal or gravel will answer all purposes. Much of the injury to the facing appears to have occurred from there being no provision for fastening boats, while loading or unloading; hence, boatmen have fastened their ropes to any projecting stone in the facing, and have probably displaced adjoining stones for the purpose. A few rough stone posts or other fastenings would prevent a recurrence of the damage.

I visited the Dutch church recently handed over to Government. I learnt that it is proposed to put a new roof framed with queen-post trusses. I think it would be a very great pity. The church is characteristic of style and time, and it is covered like many Dutch churches by a segmental framing, boarded inside, giving a light and handsome effect, the main span being about 30 feet. The roof framed of palmyrah has stood 100 years. Our Engineers ought surely to be able to make another to last as long. As might be expected in so long a time, the side walls felt the thrust and slightly yielded, but, on removal of the tiling, have very nearly resumed their position, and have left a visible space between them and some clumsy buttresses which had been affixed.

There ought to be no difficulty in reconstructing as far as necessary the roof on the old form and in securing the walls. The sounding board and pulpit are good specimens of wood-work and with other old and curious Dutch monuments or shields should be carefully preserved.

Visiting the site proposed for a battery for defence of the port, it appeared to me that this would doubtless be a good spot in many ways, but every shot aimed thereat, and missing the battery, will go into the Railway Workshops, which would be undesirable.

HIS GRACE the Governor's Note will be communicated to the Public Works Department, in view to the necessary steps being taken for giving immediate effect to the views expressed in it.

(True Extract.)

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

ORDER THEREON, 6th December 1878, No. 4,642 W.

COMMUNICATED to the Superintending Engineer, Fifth Circle, who will collect the information indicated by His Grace the Governor as being needed in connection with the Negapatam Harbour, and will meanwhile make such arrangements as may be necessary to protect the creek from injury or from further accumulations of silt.

2. The rules laid down in His Grace's Note to prevent encroachment on the ancient channel should be enforced so far as it is within the power of the local officers of the Public Works Department, referring to the proper authorities such infringements of the rules as they may not be able to deal with themselves.

3. The Superintending Engineer will report on the proposed new roof of the Dutch church after personal examination of the building.

4. Inquiry should also be made into the question of the proposed site for the battery with special reference to the objections indicated by His Grace.

(True Extract.)

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

To the Superintending Engineer, Fifth Circle.
" Consulting Engineer for Railways.

Exd. E. C. Shanker.

4642
4

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

23rd November 1878, No. 599.

Negapatam—Harbor.

Read the following:

No. 33. *Note by His Grace the Governor, dated Salem, 16th November 1878.*

NEGAPATAM.

I visited this port because I have felt great doubts as to the sufficiency of measures proposed for its improvement, and because I had learnt that very little progress had been made in the necessary repairs of the jetty.

I walked along the jetty wall, then went up the creek above the town in a boat, landed while returning on the sandspit between creek and sea, and then landed near the railway wharf and inspected the site of the suggested battery, whence a good view is obtained of the port, &c.

I am not satisfied that the proposed measures as planned are politic, or have been based on sufficient knowledge.

The port is a creek parallel with the coast from which it is separated by a narrow sandspit, covered with a growth of shrubs, &c., protected from erosion on the inside by nannal grass and some groynes of palmyrahs filled with brushwood; the mouth to the sea has been guided by a jetty of brick faced with stone, beyond which was an extension (it is said of 100 feet) that has been destroyed, two large blocks lying displaced off the end of original jetty. The creek leads to a large shallow lagoon or basin extending inland, one arm being formed into a large canal. The channel across the bar can only be kept open by mechanical power or by the natural scour of the water accumulated in the lagoon at each tide. The power of the scour of the water depends on its quantity and its proper direction on to the bar; the latter point has been kept in view, and the measures suggested are mainly directed to that point; and with the aim of increasing the force of the current are planned to still further narrow the width of the mouth. The rise and fall of the tide is stated to be only 20 inches equal about 3.3 per hour.

This may, however, not be correct, as the tidal oscillation is measured within the bar inside the creek mouth, and the supply of the lagoon and its scouring action depend on land drainage, and the inflow from the sea. It is probable that the sectional area of the creek-mouth is already too narrow. The current is stated to set strongly inwards for about an hour after H.W. This indicates apparently that the lagoon is never filled to more than 17, instead of 20 inches, and if that be the case, then a large scouring force is lost, and a further contraction of the creek-mouth may result in still further limiting the entrance of water until the lagoon becomes dry and the port closed.

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Encroachments on the ancient channel have been permitted apparently without much foresight, and others have been allowed to occur from want of attention. It is important that a few simple rules be laid down—

- (1) prohibiting any timber, or other material, being laid below H.W. mark, for temporary purposes;
- (2) regulating the mooring of boats in proper places, so as not to interfere with the tidal flow through the channel;
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No. 34.

ORDER THEREON, 23rd November 1878, No. 599.

His Grace the Governor's Note will be communicated to the Public Works Department, in view to the necessary steps being taken for giving immediate effect to the views expressed in it.

(True Extract.)

Quater
Acting Chief Secretary.

Public Works Department.
Master Attendant, Madras.

R. Bantleman.

File L.O.

2

S. L.H.

upending
The Captain
Harbor

Please send up as
soon as received Mr.

Rumhall's reply to f.o.

4642 D of 6th Decr /78-

Reply to mentions that

Mr. F has been requested
to submit his report.

By W. should of

Course see the paper,

before you send it up.

The file just sent

up has been ordered
to be sent till the further

134.57

Dec 2nd Decr

Printed November, 23rd
31

Obdt. of 1878: 31
MARINE.

THE PUBLIC WORKS DEPARTMENT,

NOVEMBER
Nov. 33 84

Navigation Harbor - Consulting Marine
His Grace the Governor, on 30th March 1878
to the necessary steps being taken for giving
immediate effect to the views expressed in it.

Paper Comes
 3/6 M.V.
 469
 Arnold
 For attention
 5/6 M

No 4642 W Public Works Department.
 PROCEEDINGS OF THE MADRAS GOVERNMENT
 Date the 6 Dec/78.
 Read the following:—

Pro: in the Marine Dept. (H.C. No 599 of 23rd Nov/78)

Communicated to
 the Supg. Engineer Fifth
 Circle who will collect the
 information indicated by
 His Grace the Governor as
 being needed in connection
 with the Negapatam
 Harbour. and will mean-
 while make such arrange-
 ments as may be necessary
 to protect the creek from
 injury or from further
 accumulations of silt.

The rules laid down
 in His Grace's Note to
 prevent encroachments on

R.A.

the ancient channel should
be enforced so far as it
is within the power of the
local Officers of the Public
Works Dept. - referring
to the proper authorities
such infringements of the
rules as they may not
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of the Dutch Church after per-
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Enquiry should also
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Battery with special reference
to the objections indicated
by His Grace.

W.H.
12

2 - Copies to Comd. 25-3-79

1 - Copy to Pub. Works 20-5-80

Supp. Engr. Fifth Circle

Comd. Engr. for Rep.

Dispd. 20-12-78

W.H.
7-2
Dispd. 6-12-78 1/642