M.R.O. 1—77,006—8-6-37.

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(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 2126 Press Mis.

376-78

Dated 15-7 1867.

Not to be folded or roughly handled

Read the following papers :—

No. 376. From A. MACKENZIE, Esq., to the Secretary to Government, Public Works Department, dated Madras, 11th May 1867.

1. I have the honour to inquire whether any steps are being taken for the repair of the landing stage at Pugh's Gardens, Adyar. The bund on which the road to the end of the stage is raised was breached by the floods last monsoon at its inner end, and the rush of water through the breach excavated a long deep channel, parallel with the river. Unless the bund is repaired efficiently, this channel will be enlarged by the next floods, and will probably before long occasion serious and lasting damage to the property of "Norton's Gardens."

2. I venture to submit that the landing stage itself is a source of danger to the properties below it. It is placed at a bend of the river, where formerly the flood waters found their way naturally and without check across the low sandy maidan, which it intersects. The bund is placed at right angles to the stream, it projects too far into the river, thus confining the channel (dangerously affecting the opposite bank). It is not high enough, and the masonry with which it is faced is of most imperfect construction, the mortar containing insufficient lime.

3. In its present state the landing stage is a source of danger to the properties further down the river on same side, and I have the honour to request that it may be either put into thorough repair, its level raised above flood marks, and its face well and efficiently protected by masonry throughout its entire length, (the breach last monsoon was at a spot where there was *no* protecting masonry,) or else that it may be removed altogether, and no obstruction be left to a free passage of the flood waters.

Awaiting your reply, I have, &c.

—

Referred to the Superintending Engineer of the 4th Division for inquiry and report.

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

14*th May* 1867.

—

No. 377. From the Acting Superintending Engineer, 4th Division, to the Secretary to Government, Public Works Department, dated Madras, 3rd July 1867, No. 1,668.

1. With reference to your endorsement dated 14th May last, on a letter from Mr. A. Mackenzie, dated 11th idem, to your address, on the state of the boat harbour in the Adyar river herewith returned, and your Memorandum dated 29th May 1867, No. 119, I have the honour to forward plan, specification, and estimate, amounting to Rupees 2,370, for repairing the wharf and excavating a new boat basin in lieu of the present work.

1 Original letter with Government endorsement, dated 14th May 1867.
1 Plan.
1 Estimate.
1 Specification.

2. The estimate has been prepared by the Executive Engineer, Mr. Fraser, and I approve of the modified arrangements allowed for. It admits of a new boat basin and slip, with the sill 4 feet below mean tide level, the former having a

capacity of 210 feet by 70 feet. The wharf side of this basin, as well as the sides of the wharf, and breached portions of the road will be revetted with stone set in mortar. It is proposed that the head of the new work should be withdrawn 325 feet, which will offer less obstruction to the floods, the stream being partly diverted by a groyne above the causeway from any action on the head of the wharf, which is to be rounded off and protected by stone.

3. The cost of the work is considerable, owing to the amount of stone facing in chunam, and large quantity of earth cutting, but if Government are not prepared to sanction such an expenditure, I must reduce the size of the boat basin, and set the stone in clay.

4. There would not have been such delay in replying to this requisition had Mr. Fraser paid more attention to my order calling for a report and estimate on the 27th May last, and to subsequent reminders.

No. 378. ORDER THEREON, 15th July 1867, No. 2,126.

CIVIL WORKS, No. 56.

1. These papers relate to a work designed and constructed last year on the northern bank of the Adyar, nearly opposite the head of the Southern Coast Canal, for the foundation of a boat basin and landing wharf at the end of a jetty projecting into the stream, and connected with the shore by an embanked road-way.

2. It appears that during the fresh which occurred last December this jetty and causeway, acting as a powerful groyne, caused such an obstruction to the current as to create a violent set along its face and round its outer end, and that the effect of this was to destroy the greater portion of the wharf and boat basin and extensively to breach the raised causeway, as well as generally to shake its stability. Moreover, the great projection of the work necessarily deflected the stream and gave it a tendency to cut away and encroach upon the land on the opposite side of the river. This the stream has actually done to some extent, and would probably have carried away a large slice of land on the south bank had not the causeway breached and the end of the jetty been undermined and destroyed.

3. It is evident that the design of the work is faulty, and though, in preparing a plan for its restoration, Mr. Fraser proposes to withdraw its head 325 feet, the Government are inclined to think it will still project so much too far into the river as to be a source of injury to the opposite bank, and of danger to its own foundations.

4. The fresh of last December was by no means a very unusually high one, and the Government, understanding that the work was topped by the water, are of opinion that the causeway is not sufficiently elevated to secure it from being again breached in the manner complained of by Mr. Mackenzie. The proposed position of the boat basin too, immediately to leeward of the projecting wharf, appears to be very objectionable, inasmuch as the eddy round the head of the wharf will cause large quantities of sand to be deposited in the still water which will be formed during freshes at exactly the site the basin is intended to occupy. The only safe and practical mode of providing a landing place will, it is believed, be by constructing a wharf parallel with the direction of the stream, not far from the natural

bank of the river, and leading the deep water up to it by a channel through the sand in front.

5. The Superintending Engineer will take these observations into consideration, and, in communication with Mr. Fraser, will submit a revised project, with the necessary estimates, when the Government will be in a position to judge whether the traffic will justify whatever outlay may be required.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 4th Division, with one Plan and two Enclosures.
,, Revenue Department.

Exd. S. T. Augustin.

Madras. 11. May 67

The Secretary to Government
Public Works Department.
Fort St George.

Sir

I have the honor to enquire whether any steps are being taken for the repair of the landing stage at Pughs Gardens adyar. The bund on which the road to the end of the stage is raised, was breached by the floods last monsoon at its inner end. and the rush of water through the breach excavated a long, deep channel parallel with the river. Unless the bund is repaired efficiently this channel will be enlarged by the next floods and will probably before long

Your most obedt servt
A. Mackenzie

long occasion serious & lasting damage to the property of "Nortons Gardens".

I venture to submit that the landing stage itself is a source of danger to the properties below it. It is placed at a bend of the river, where formerly the flood waters formed their way naturally and without check across the low sandy meadow which it intersects. The bund is placed at right angles to the stream. it projects too far into the river, thus confining the channel: (dangerously affecting the opposite bank). It is not high enough - and the masonry with which it is faced is of most imperfect construction. the mortar containing insufficient lime — In its present state the landing stage is a source of danger to the properties further down the river on same side. and I have the honor to request that it may be either put into thorough repair - its level raised above flood marks and its face well & efficiently protected by masonry throughout its entire length; (the breach last monsoon was at a spot where there was no protecting masonry) or else that it may be removed altogether, and no obstruction be left to a free passage of the flood waters.

Awaiting your reply
I have the honor to be Sir
your most obedt servt
A. MacKenzie

Sup.t Engr.s Office 4th Div.n
Madras 3d July 1867

No. 1668.

From,

Lieut.t Colonel J. Beaw R. E.
Ag.t Sup.t Engineer 4th Div.n

To,

Colonel C. A. Orr R. E.
Secretary to Government P.W.D.
Fort Saint George

Sir,

With reference to your endorsement dated 14th May last on a letter from Mr. A. MacKenzie dated 11th Idem, to your address, on the state of the boat Harbour in the Adyaur River herewith returned and your Memo dated 29th May 1867 No. 119, I have the honor to forward plan, Specification and Estimate amounting to Rupees 2,370---- for repairing the Wharf and excavating a new boat Basin in lieu of the present work.

The Estimate has been prepared by the Executive Engineer Mr. Thacker and I approve of the modified arrangements allowed for. It admits of a new boat basin and slip, with the sill 4 feet below mean tide level, the former having a capacity of 210 feet by 70 feet. The wharf side of this basin, as well as the sides of the wharf, and breached

2

Enclosures.
Original letter with Government endorsement
1 Plan
1 Estimate
1 Specification.

1 — occasion serious & lasting dan

No. 376

Dated 11th May 1867
Rec.d 15th May 1867

Requesting that the landing stage at the Adyar may be thoroughly repaired or that it may be altogether removed.

Ex. No. 2126-15 July 1867.

Referred

Executive Engineer 4th Div.n for report and return of papers.

Chief Engr. P.W.D.

Dept. Secy. to Govt.

Pro: of Govt. for Engr.
No. 1775.

From
A. Mackenzie Esq.
To The Secy. to Govt. P.W.D.

C. - 8th July 1867 No. 114

breached portions of the road will be revetted with stone set in mortar - It is proposed that the head of the new work should be withdrawn 325 feet, which will offer less obstruction to the floods, the stream being partly diverted by a groyne above the Causeway from any action on the head of the wharf, which is to be rounded off and protected by stone.

3 The cost of the work is considerable, owing to the amount of stone facing in Chunam and large quantity of earth cutting, but if Government are not prepared to sanction such an expenditure, I must reduce the size of the boat basin, and set the stone in clay.

4 There would not have been such delay in replying to this requisition had Mr. Fraser paid more attention to my order calling for a report and estimate on the 27th May last, and to subsequent reminders.—

I have the honor to be
Sir
Your Most Obedient Servt

H Lean Lt-Col R.E.
Actg Supt Engr 4th Div.

GP

Public Works Department.

No. 2126

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 15th July 1867

Read the following

From A. Mackenzie Esqre
From the Actg Supdg Engineer 4th Dn

Here enter No dated 18 May/67

(Here enter No 1868 dated 3d July/67

These papers relate to a work designed and constructed last year on the northern bank of the Adyar, nearly opposite the head of the Southern Coast Canal, for the formation of a boat basin and landing wharf at the end of a jetty projecting into the stream, and connected with the shore by an embanked roadway.

2. It appears that during the freshes which occurred last December this

Read the following Letter from
The Actg Supdg Engineer 4th Dn
No 1868 dated 3d July 1867.

Ordered that the Plan Specification and Estimate amounting to Rupees 2370 for retaining the wharf and excavating a new Boat Basin in lieu of the present work in the Adyar River.

No 2126 - 15th July 1867

No 2126 dated 15th July/67 R. 11th

No 3115

Purdy/67 Ch. 11E
Eng. 2926 - 13 January 1830

this jetty and Causeway, acting as a powerful groyne, caused such an obstruction to the current as to create a violent set along its face and round its outer end, and that the effect of this was to destroy the greater portion of the wharf and boat basin, and extensively to breach the raised causeway, as well as generally to shake its stability - Moreover, the great projection of the work necessarily deflected the stream, and gave it a tendency to cut away and encroach upon the land on the opposite side of the river - This the stream has actually done to some extent, and would probably have carried away a large slice of land on the South bank had not the causeway breached, and the end of the Jetty been undermined and destroyed -

It is evident that the design of the work is faulty, and though, in preparing a plan for its restoration, Mr. Fraser proposes to withdraw its head 325 feet, the Govt are inclined to think it will still project so much too far into the river as to be a source of injury to the opposite bank, and of danger to its own foundations - The

The freshet of last December was by no means a very unusually high one, and the Govt. understanding that the work was tossed by the water, are of opinion that the causeway is not sufficiently elevated to secure it from being again breached in the manner complained of by Mr. Mackenzie.

The proposed position of the boat basin too immediately to leeward of the projecting wharf, appears to be very objectionable, inasmuch as the eddy round the head of the wharf will cause large quantities of sand to be deposited in the still water

P. W. 186 . Department.

No.

Proceedings of Government.

Dated

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-cept the site the basin is intended to occupy-
The only safe and prac-
-tical mode of provid
ing a landing place
will, it is believed, be
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through the sand in
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-sideration, and in
communication with
Mr. Fraser, will subm

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to judge whether the
traffic will justify
no
whatever outlay may be
required -

To
The S. Engr 4th Dr with one
plan & two enclosures
Revenue Dept

Dessa 16/7/67

Pub: Works 1867 Depart.

Pro: of Govt. for July
No. 2126

Pro: of the Madras Govt.
Dl. 15th July 1867

Father Cop 3288/67

Instructing the
Supg. Engr. of the 4th Division
to Submit in communication
with Mr. Fraser, a revised
progress for the Wharf and
Boat Basin in the Adyar
River near the head of the
Southern Coast Canal.

No. 376 to 378

C. 8th July 1867 Dr. 1