

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	2088	Press ~~Mis.~~
⁵¹⁻⁵² Dated	6-8-	12/1868.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
4th August 1868.*

No. 51. Read the following Proceedings of the Board of Revenue, dated 21st July 1868, No. 5,307.

Read the following letters:—

From W. FRASER, Esq., C. E., Executive Engineer, to the Superintending Engineer, 4th Division, dated Pulicat, 21st May 1868, No. 48.

1. I have the honor to inform you that since the strong south and west winds have set in, and the almost closing of the Pulicat bar, a great change has come over the Northern Canal. The water has suddenly gone down, developing shoals in several parts of the navigation. The change in the appearance of the backwaters is very remarkable, especially about Pulicat, where the broad water of more than half a mile in width has been reduced to about sixty feet. It looks more as though there had been some sudden upheaval of the land than anything else.

2. Between Madras and Pulicat lake, (twenty-five and a half miles,) the traffic has been seriously interfered with at three places, namely, Kalanjee, Sattankuppum at the twenty-third mile, and at Pulicat. These obstructions have been cut through, and the navigation is now open into Pulicat lake.

3. At the Sattankuppum, there has always been great difficulty in keeping the canal open on account of the shifting sand-banks, and the sand being blown into it, especially from the east. To cut the shifting banks off, and avoid the tortuous channel through them, Colonel Chambers laid out a piece of new canal and finished about half a mile; but he was obliged to abandon it, as it could not be kept open. This place has been a source of great annoyance to boatmen, and of expense to the State, so I have thought it best to take this opportunity of dealing with it effectively. I surveyed it on Sunday last, and laid out the best line I could get consistent with economy, and work is now under execution. The plan, section, and estimate will be sent up to-morrow.

4. Since writing the above, I have reached the Musjeed (or Muzzeed), forty-seven miles from Madras. The lake ends, and the canal to Druvarajapatam begins here. The mouth of the canal is nearly silted up, and for a considerable way out the lake is very shallow. This I shall have opened to-morrow morning.

For the past twenty-five days, several parties of coolies have been at work opening a channel through the centre of the canal between Musjeed and the sixty-sixth mile; and I hope to have the entire navigation open in four days.

5. Some parts of this portion of the canal have been filled with sand to the water level; some three or four years ago, by order of the Collector of Nellore, the northern part of the Pulicat lake, which was very shallow, was bunded off to prevent the water flowing over it, and thus prevent the production of spontaneous salt when certain portions dried out in the hot weather. This part of the lake is now an immense sandy plain, along the east side of which the canal runs. Hitherto the water has been high enough to keep the sand moist, except towards the end of the hot season, and it did not blow *very* much; but this year, we had the water unusually low, and for some days the west winds unusually strong. The consequence was, that the whole plain became one sea of moving sand, a great deal of which was blown into the canal. I send you a tracing from the Indian Atlas Sheet, No. 77, shewing the part of the lake that has been bunded off. The area is about

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80,000 acres. I cannot help thinking that if the account were made out between the interest of the navigation and those of salt, it would shew a balance in favor of leaving the lake as it was.

6. I need hardly say that the maintenance allowance will not meet the cost of these works. The estimates will be sent up as speedily as possible.

P. S.—Jonagapolliem, at the north end of Pulicat lake.

22nd May.—I have just come in from measuring the canal north of this, and I find that the water level is now (22nd, 10½ A. M.) about eighteen inches lower than it was at the same season in 1866 and 1867. I allude to the average height of low water of those years.

(Signed) W. F.

No. 973.

Copy forwarded to the Board of Revenue for information.

MADRAS, (Signed) A. J. M. BOILEAU, Colonel, R. E.,
27th May 1868. *Superintending Engineer, 4th Division.*

ENCLOSURE No. 1.—Map.

From the same Officer, dated 28th May 1868, No. 58.

1. I have the honor to forward a *Map*, section, and estimate for the work at Sattankuppum, alluded to in my letter, No. 48, dated 21st May 1868. The red line on the Map is the one now being excavated. It is the best I could lay out, consistent with suitability and cheapness. The old boat channel is marked by a blue line.

2. One item in the estimate, amounting to 596 Rupees, is for work already done. This was done on emergency to let boats pass. I could not lay out a proper line so as to take in the whole of the work thus done; but I have got in more than three-fourths of it, and the rest will be useful to pass boats one side, whilst the work is in operation.

3. Between the points marked D. and E., there is a break in the line of trees along the east side of the navigation. Every effort hitherto made to get anything to grow there has failed; but I suppose that no extraordinary effort was ever made. The east winds blow the sea-sand through this gap and out into the backwater, forming banks and altering the channel every year. I am now having a close hedge of Tary (screw pine) planted inside the line of trees; and so soon as I can get young plants, I shall put in a treble row of Casuarina trees. These I hope will stop the sand. These works will be a vast improvement at this place, as the old boat channel was most vexatious.

4. I have been unable to send up these papers so soon as I had hoped, and the plans are very roughly prepared; but being encamped in the middle of a sandy plain, and a perpetual dust storm, are not favorable to such operations.

*Proceedings of the Madras Government, Revenue Department,
4th August 1868.*

No. 1,177.

Forwarded to the Board of Revenue, in continuation of Memorandum from No. 973, dated 27th May 1868, with a request that the estimate of cost for excavating a new boat channel at Sattankuppum, in the district of Madras, be sanctioned from the sum of Rupees 9,000 entered in the current Local Fund Budget for the "Construction of Canals."

(Signed) A. J. M. BOILEAU, Colonel, R. E.,
Superintending Engineer, 4th Division.

ENCLOSURE No. 1.—Map.

ENCLOSURE No. 2.—Estimate.

ENCLOSURE No. 3.—Section.

ENCLOSURE No. 4.—Specification.

In reference to Mr. Fraser's report on the unsatisfactory condition of the Pulicat Canal, which forms the enclosure of the first of the foregoing papers, I have the honor to suggest that it would be well that attention should be directed to the cause of the scarcity of water in the Pulicat lake, namely, the condition of the bar, through which the tidal water enters the lake, and subsequently the canal.

The water which has drained off into the sea is prevented, by the rapid current, from returning in equal volume; and it appears to the Board that it would be possible to retain this water in the lake by the erection of a low wall across the neck of the communication, provided with self-acting shutters, which would allow twelve feet of water-way, at intervals of twelve feet. Thus in a length of 150 feet long, there would be some 150 feet of water-way. Two feet above low water would be sufficient height for the weir, over which flood-water from the lake would escape to sea.

The Board are inclined to recommend the consideration of the weir system, not only for the outlet of the Pulicat lake, but also for those of the Palar and other canals.

At those places where the lake is usually dry, and is exposed to sand-drift from the east winds, the Board would recommend the planting of Casuarina trees; and in accordance with the Superintendent Engineer's docket of the 8th June, they are glad to hear that some work has been done to some extent.

In the second paper above recorded, the Superintendent Engineer submits an estimate, amounting to Rupees 2,760, for excavating a new boat channel at Sattankuppum, in the Madras District, which is recommended for the sanction of the Board from the sum of Rupees 9,000, provided in the current year's Canal Fund Budget on account of the "Construction of Canals."

Proceedings of the Madras Government, Revenue Department.
4th August 1868.

No. 52.

ORDER THEREON, 4th August 1868, No. 2,088.

Local Fund, No. 3.
Account.

1. The estimate for excavating a new boat channel at Sattankuppum, amounting to Rupees 2,760, is sanctioned.

2. The Board's remarks in paragraphs 1 to 4 of their Proceedings will be referred to the Public Works Department.
(True Extract.)

(Signed) R. A. DALYELL,
Acting Secretary to Government.

To the Board of Revenue.
.. the Public Works Department.
.. the Accountant General.

Exd. J. Tullouch.

retain this water in the lake by the erection of a long weir, across the neck of the communication, provided with self-acting shutters, giving each twelve feet of waterway, at intervals of twelve feet. Thus in a weir 300 feet long, there would be some 150 feet of waterway. Two feet above low water level would be sufficient height, for the weir, over which floodwater from the land would escape to sea.

3. The Board are inclined to recommend the consideration of the weir system, not only for the outlet of the Pulicat lake, but also for those of the Palar and the Cooum.

4. In those places where the lake is usually dry, and is exposed to sand drift during high winds, the Board would recommend the planting of Casuarina trees; and from the Superintending Engineer's docket of the 8th June, they are glad to learn that this has been done to some extent.

5. With the second paper above recorded, the Superintending Engineer submits an estimate, amounting to Rupees 2,760, for excavating a new Boat Channel at Sattankuppum, in the Madras district, which is recommended for the sanction of Government from the sum of Rupees 9,000, provided in the current year's Canal Fund Budget on account of the "Construction of Canals."

(True Copies and Extract.)

Almayer
Acting Secretary.

To the Acting Secretary to Government, Revenue Department,
with two Maps, Section, ~~two~~ Estimates, and Specification.

Copy to the Superintending Engineer, Fourth Division.
.. to the Acting Controller of Public Works Accounts.

Ch 2088

The Estimate for excavating a new Boat Channel at Sattankuppum amounting to Rs 2760 is sanctioned

The Board's remarks in para 1 to 4 of their Proceedings will be referred to the P. W. Department.

Exd. J. Wright.

W.D.
4th Aug 68

14 Copies to the P. W. Dept
21 ————
6 ————
W.D. Dept
Acting Secy

2

21st June 1888

Collected papers

19th 1888 Department
No. of 4 out for duty

No. 257

PROCEEDINGS OF THE BOARD OF REVENUE,

Dated 21st July 1888.

20th 1888
20th 1888
20th 1888

No. 5,307.

1811/52

21st July 1888

Suggesting to Government that the attention of Mr. Fraser should be directed to the primary cause of scarcity of water in Pulicat lake, and recommending the consideration of the weir system, not only for outlet of Pulicat lake, but also for those of Palur and Coimbatore, and recommending for sanction estimates from Superintending Engineer amounting to Rs. 2700, for excavating a new Boat Channel at Sattanooppuram in Madras District.

20th 1888
with order