

Marine (1896) Department.

G.O., No. 364 Marine

DATED 21st May 1896

[Despatch Abstract.]

Sanitary condition of the Cooum : P.

Pros. requesting the Chief Engineer for Irriga-
-tion to work out his scheme for the improve-
-ment of the —, in detail, in connection
with the reconstruction of the Napier
bridge, Comd. &c. to the Chairman, H. J. B.

FURTHER PAPERS. •

Govt. of {1896} Madras.
PUBLIC WORKS.

Dated May, 13th.

Recd.

Encl

G.O. No. 415 I., 13th May 1896.

MAY.

Sanitary Condition of the Cooum

The Chief Engineer for Irrigation requested to work out his scheme for the improvement of the — in detail in connection with the reconstruction of the Napier bridge.

with order

No 364 Mar 9 21st May 1876
Communicated to
the Chairman Marlboro
Trust Board for infor-
mation.

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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following paper:—

No. 84 I.

Note by the Chief Engineer for Irrigation.

The question of the improvement of the sanitary condition of the Cooum river was dealt with in the papers published with G.O. No. 1651 M., dated 7th November 1894, and the plans and estimates for the canal from the north end of the harbour into the river, which was advocated by the late Chief Engineer, Colonel Pennycuik, were the outcome of the orders conveyed in paragraph 11 of the Government Order referred to above.

2. After considerable discussion, these estimates were sanctioned for execution in G.O. No. $\frac{1084}{A}$ I., dated 14th December 1895. These estimates were passed through the office of the Chief Engineer, General, Roads and Buildings Branch, but when they were transferred to the Irrigation Branch under the orders of His Excellency Lord Wenlock, I had occasion to draw attention to the illegality of the procedure in sanctioning the execution which had been adopted, similar views having been expressed almost at the same time by the Examiner, Public Works Accounts, and confirmed on a reference to the Accountant-General, Public Works Department, by the latter officer himself.

Vide office-note from Examiner, P.W. Accts., No. 949 D./A., dated 1st April 1896.

3. It was necessary, therefore, to stop all further action in the execution of the work by G.O. No. 190 I., dated 21st February 1896, pending the receipt of the plans and estimates for the harbour entrance of the canal, which were being prepared by the Engineer to the Harbour Trust Board. These estimates were dealt with in G.O. No. 119, Marine, dated 26th February 1896, and were passed on to the Irrigation Branch for scrutiny.

4. I am in a measure glad of the delay that has occurred in finally disposing of this subject, as it enables me to bring forward my proposal already made in my note No. 29 E.W., embodied in G.O. No. 1958 W., dated 7th August 1894. I therein suggested that a recoupment of the Cooum could be maintained from Ennore, and re-urged this idea in my office-note No. 256, dated 3rd October 1894.

5. In a note drawn up by Lieutenant-Colonel Smart for the information of the Honourable Mr. H. W. Bliss, he brings forward a proposal for a canal from the south end of the harbour into the Cooum near the General Hospital and incidentally refers to an auxiliary indraught from Ennore. I am of opinion, however, that if a sufficiently wide entry be given to the tide from Ennore bar into the canal just below Ennore lock, and if the reach of the canal from that point down to the Madras basin be widened, nearly all the advantages claimed by a canal direct from the harbour could be obtained at an expenditure of about Rs. 30,000 as against (in the case of the canal from the north end of the harbour) that of over ten lakhs of rupees.

6. The scouring sluices proposed to be constructed at Napier's bridge may be built to dispose of water in excess of M.S.L., in order that a fresh supply might be admitted from Ennore to bring the river up again to O.H.T.L. As for the scouring action established by such sluices on the bed of the river, it will probably not be felt to

more than a couple of hundred yards above the same. It would be inadvisable, in any case, to lower the water-level in the river to the lowest possible. This would mean, not only stoppage of navigation until the water-level rose again, but would cause the river margins and shoals of filth and sewage to be exposed to the festering action of a tropical sun.

7. I would suggest, therefore, that the question of a canal from the harbour be shelved and the simple expedient proposed in substitution thereof be adopted, viz., a sufficiently wide inlet from the Ennore backwater into the Buckingham canal, and this improvement of the latter down to the Madras basin. For this purpose I would provide a masonry inlet 100 feet in length fitted with screw shutters with its crest fixed at O.L.T.L. These shutters would be worked twice a day by the Ennore lock establishment for the admission of fresh water from the backwater.

8. To show what an appreciable effect even the present Ennore lock, which is only 15 feet wide, has upon the canal inside and Cooum river, I may state that since the closure of the Napier's bridge bar on the 25th February the water level in the canal and river rose 0.90 foot by the 1st March. With an entry 100 feet in width, the results, I submit, would be proportionately intensified. I would therefore ask the Government before committing itself to an expenditure involving ten lakhs at the least estimate, to try the effect of carrying out the proposals I have made involving only one-thirtieth of that cost.

9. A sketch-map showing my proposals is appended for reference.

MADRAS, (Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
9th April 1896. Chief Engineer for Irrigation.

ORDER—No. 415 I., dated 13th May 1896.

The Chief Engineer for Irrigation will work out the scheme in detail in connection with the reconstruction of the Napier bridge.

(True Extract.)

[Signature]
Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.

" Superintending Engineer, II Circle,
" Executive Engineer, Buckingham Canal division, } with tracing.
" Examiner, Public Works Accounts.
" Revenue Department.

" *Marine Deptt*
" *St. M. Deptt.*

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Secretary to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.

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- " Executive Engineer, Buckingham Canal division, } with tracing.
- " Examiner, Public Works Accounts.
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" Marine Deptt.
" L & M Deptt.

Exd. T. K. Narayana Aiyangar.
Spare Copies

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*Communicated
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Sd/ S. M. C.

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The Ch. A. I. B.