

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

Note by the Chief Engineer, Public Works Department.

Trichinopoly Water-works.

The subsidiary pumping station is complete, but the engines have not yet been tested.

2. The main pumping station, the site of which was changed after the floods of 1893, is making fair progress ; the pumping well is sunk to its full depth ; the screening chamber well has to be sunk 15 feet more and the three collecting wells have been sunk 12' 1", 8' 0" and 5' 0" out of their total depth of twenty-three feet.

3. It is stated that no difficulty has yet been experienced in sinking these wells, but it is probable that the difficulty will increase with the depth sunk and it would be well to plaster the outside with smooth plaster ; this has been done with good results in the case of the screening chamber well, and as only the bottom and not the sides of the collecting wells are depended on for the entry of water, there is no objection to the use of plaster.

4. Portland cement has been used for the screening chamber well, and if less than ten days is available for its setting, this material should be used, but if ten days or longer can be given, good surki plaster will be just as effective and much cheaper.

5. A very small stream, apparently a branch of the river, runs along the Padugai about thirty feet from the foot of the retaining wall which protects the space occupied by the pumping station, and it has been suggested that this may cause a scour which might endanger the safety of the retaining wall. I do not think there is any appreciable danger of this and the branch might probably be closed altogether in all but heavy floods by a small bank across its head ; it should be considered in the Irrigation Branch if this can be done.

6. It will be enough for the present to watch it carefully during the next flood season, and if it shows any tendency to scour, a stone pitching in the position which has been sketched on the section of the river will give all the protection that is necessary.

7. The progress already made is good, and there is at present no reason to anticipate an excess on the estimates ; the well-sinking will probably be completed during the present hot weather, and the erection of the engines and pumps can then be proceeded with, but the placing of the pipes connecting the infiltration wells will be a troublesome business which can only be done when the river bed is dry, or nearly so.

8. Mr. Minchin expects to be able to bring the works into operation in four or five months, but this involves the completion of the work mentioned above in less than three months, and it is doubtful whether this can be done.

Tanjore Water-works.

9. The infiltration wells and gallery are complete, the engines and pumps in position and the engine-room wells more than half finished; the principal work remaining to be done is the renewal of the Puducolam road, damaged in 1893, and the construction of the new cross drainage works along it. Sanction to the estimate for these has only lately been received, and they are making good progress; the new 450 foot road dam is almost complete, the foundations of one new, three-arch culvert are almost finished and those of a second just begun; on the completion of these works depends the laying of the portion of the main which passes only this road; the remainder of the pipe-laying is complete, and there seems no reason why the works should not be brought into operation before the end of April.

10. Here, as at Trichinopoly, the cold season has been one of the driest on record and if pumping is begun during the present hot weather the test of the capacity of the water-supply will be about as severe as is possible.

11. The progress made with both these projects and the manner in which the work is being done are eminently satisfactory and reflect the highest credit on Mr. Minchin, the Assistant Sanitary Engineer in charge, whose industry and skill deserve acknowledgment.

12. Mr. Minchin apparently has charge of the works at Madura and Dindigul in addition to those at Tanjore and Trichinopoly; this is, in my opinion, too heavy a charge for one man, and he should, if possible, be relieved of the charge of the two southern projects; the two northern ones involve quite sufficient responsibility. Mr. Jones informs me that he proposes to apply for an increase of salary to Mr. Minchin, and I am bound to say that I consider such application quite reasonable, even if he be relieved of Madura and Dindigul.

Madura Water-works.

13. The works appear to be in good order, and as yet but little inconvenience has been felt from shortness of water-supply; this inconvenience will however be certain to increase rapidly with the progress of the hot weather, and the excavation of the channel recommended after my inspection in September last should be pushed on as rapidly as possible. This channel has been begun but requires to be carried into the clay underlying the sand to be of any real value; as yet it has only been taken a short depth into the sand itself, but even with this slight depth it causes a perceptible increase in the supply to the works.

14. The head driver states that the water-supply diminishes in a somewhat mysterious manner during the night, reaching its minimum at about sunrise, after which it increases as the day goes on; no apparent cause is assignable for this, and the matter might be worth investigating.

15. I understand from the Sanitary Engineer that the municipality have suddenly reduced the establishment employed upon these works. Mr. Jones will doubtless report separately on this point, and as I could not obtain any accurate information on the matter in Madura I am unable to express any decided opinion thereon. It is however certain that it is most undesirable that municipalities who are in the possession of works of this class should be allowed to make sudden alterations in the establishment employed on them; they contain a quantity of valuable and somewhat complicated machinery, and as Government in all cases contributes largely to the cost of the works it is entitled to see that proper care is taken for their maintenance and preservation.

MADRAS,
7th March 1895.

(Signed) J. PENNYCUICK, Col., R.E.,
Chief Engineer, P.W.D.

No. 971-C.

Transferred to the Local and Municipal Department.

11th March 1895.

(Signed) J. PENNYCUICK, Col., R.E.,
Secretary to Government, P.W.D.

ORDER—dated 28th March 1895, No. 566 M., Local and Municipal.

Communicated to the Sanitary Engineer and the Municipal Councils of Trichinopoly, Tanjore and Madura.

2. The Chief Engineer's suggestion in paragraph 5 of his note will be considered in the Public Works (Irrigation) Department.

3. The Government notes with pleasure the testimony borne by the Chief Engineer to the good work done by Mr. Minchin.

(True Extract.)

Ranio
for Chief Secretary.

To the Sanitary Engineer.

„ Chairman, Municipal Council, Trichinopoly,
„ „ „ Tanjore, } through the Collectors concerned.
„ „ „ Madura,
„ Public Works Department.
„ Public Works (Irrigation) Department.

Mad. A. Raitt.

Gobt. of {1895} Madras.
LOCAL AND MUNICIPAL.

26.3.95 No 7695
11.3.95 No 9711 C

S.V.C

O. No. 8.4.95

No 873 W. 1/9 April 95

Recorded.

C.M.
8/4/95

Issued

Recd.

Encl.

G.O., 23th March 1895, No. 566 M.

MARCH.

Water-works.

Communicating to the Sanitary Engineer and the Municipal Councils of Trichinopoly, Tanjore and Madura, note by the Chief Engineer, Public Works Department, on the — in those towns, and stating that that officer's suggestion in paragraph 5 of the note will be considered in the Public Works (Irrigation) Department.

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J. F. PRICE,
Chief Secretary.

To the Sanitary Engineer.

„ Chairman, Municipal Council, Trichinopoly,
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„ „ „ Madura, }
„ Public Works Department.
„ Public Works (Irrigation) Department.

Ed. A. Raitt.

Gobt. of {1895} Madras.

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(sd) C.H.B.B.

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