Public Works (1898) Department.

G.O., No. 1972 W

DATED 5th August '98

[Despatch Abstract.]

Kumbakonam Water Supply Project

Ins: L & M Dept Conceding that the preparation of the ——— should be proceeded with first & that pending the sanction of a General Scheme of drainage ~~for the town~~, small schemes of drainage for the worst parts of the town may be taken up & carried out as funds become available, Communicated to the S. E. Circle with Remark.

Indexed.

[P. W. 33. 1,000—23-6-98.]

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

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Public Works (1898) Department.

CURRENT No. 6044

From The Local & Mund. Deptt.

Order No 1972 W dt 5-8-98

Communicated to the Supt Engr V circle

No. 1253 all Mis.

the sanctioned estimate for the drainage of Solayappanmudali Street should be put in hand as soon as the necessary funds have been provided by the Municipal Council.

ASK 27-7-98.

Dated 12-7-98.

Received

Registered 13-7-98

Enclosures 1 roll & blans. (returned with Work)

Spare copies

SUBJECT.

Drainage

Stating that the preparation of the water supply project for Kumbakonam should be proceeded with first, that it would be quite useless to design a general scheme for the whole of the town & that in the meantime small schemes of drainage for the worst part of the town may be taken up & carried out as funds become available.

T.A. B.C.

S.S. V circle

with plans

Dft

(S.S.254

BACK PAPERS.

No.	Date.
1574C	15-3-98
1391C	7-3-98
2232W	16-8-97
3011C	30-6-97
715 M	27-3-97 (G.C)
1749C	26-3-97
3002C	3-8-96
1170 M	30-7-96 (Docket)
2060W	16-7-96
1015 M	17-6-96

FURTHER PAPERS.

No.	Date.

Local and Municipal Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following papers:-

From the Chairman, Municipal Council, Kumbakonam, No. 674, dated 19th October 1897.

In forwarding the accompanying resolutions of the Council for such orders as Government may deem proper, I have the honour to bring the following facts to the consideration of Government:-

1. The work that is meant to be carried out at a cost of such a large outlay as Rs 6250 is for the benefit of the inhabitants of 15 houses in Reddy Row's tank, North side at the present time.

2. For various reasons this work was not put in hand during the last financial year and the provision made in the budget of that year had lapsed.

3. A new allotment has to be made for the same as no funds are provided in the current year's budget.

4. The finances of this Council as far as a forecast may be made just now are such as not to allow of such a work being undertaken during the year for the following reasons:-

(a) A gross income of Rs 28,000 was expected from tolls: at the sale the highest bid was only for Rs 24,400.

(b) The Professional tax under the new Act would be about three-fourths of the estimated income which has been put down at Rs 11,000.

(c) The opening balance was according to the budget of previous years not less than Rs 20,000, but according to this year it was only Rs 6730 with a liability for works executed in March last and paid for in subsequent months to the extent of Rs 2000.

(d) Under minor items such as those of markets, slaughter houses &c there has been a deficit of Rs 230 against a budget estimate of Rs 4,100.

(a)

(e) The expected increase in the Tax on buildings on which the Council depends cannot yet be regarded as realised as it is not possible to tell how many appeals would be preferred and what remissions would be granted by the Council. As a matter of fact, the house tax bills for the current financial year have not been issued pending the ~~remission~~ revision which was completed only a few days ago by the special Deputy Collector.

5. In deference to the wishes of the Sanitary Commissioner who has been repeatedly calling the attention of this Council to the cheapness and usefulness of the Vizagapatam Filter in general and also to the suggestions of Surgeon Captain W. C. Vickers, special Commissioned officer on Mahamakham duty in particular, I caused the present filter to be built immediately after the Mahamakham festival and the filter is working satisfactorily. To make it a complete success, all that is required is to acquire a portion of land near the drain to serve as a sewage farm. It may be urged that though it works well now, in the rainy weather it might prove a failure. But that has to be proved again. A fair trial may be allowed to the filter during the whole of the current of the year and if it does prove a failure (which I very much doubt) it will then be time to think of some costlier plan.

6. The Sanitary Commissioner may again be consulted as also the Sanitary Engineer and some cheaper method of disposal of sewage devised.

7. If it is found impossible to think of nothing else for the mitigation of the nuisance, then the plan already prepared by the Sanitary Engineer may be adopted.

8. I am personally not averse to doing anything that may conduce to the improvement of the health of the people. All that I plead for is when a work can be done at a cheaper rate and all the benefits too of the costlier scheme thereby derived, there is no need to launch into a large expenditure of money especially at a time when the finances of the Council are of dubious elasticity.

9. I may point out the necessity of first attending to the

Waterlogged

a delay of more than 3 months.

3. A sum of Rs 2500 has been voted from an allotment in the current year's budget: the provision of Rs 3750 in next year's budget may be a matter of some difficulty, but there is no reason to doubt its possibility.

4. In his second letter the Chairman has corrected the misstatement in his first regarding the number of houses for which the scheme is intended. However it is a question not so much of the number of houses immediately benefited as of the desirability of removing at least one plague spot from the town. The Council has steadily supported this scheme ever since 1895, and I do not think it should be rejected or deferred, because there are other places also calling for attention.

5. I sympathise with the Chairman's desire not to spend more money than is necessary; but the effectiveness of any cheaper remedy is very doubtful. After personal inspection, I cannot assent to the Chairman's view that the existing Vizianagram filter is "working satisfactorily" that is if it is meant to imply that it diminishes the nuisance to any marked extent. The sewage after passing through the filter still stinks abominably, and as there is no outlet it lies stagnating by the side of the street.

6. At the same time there is a strong conflict of opinion on certain points of the sanctioned scheme, between the Executive Engineer and the Sanitary Engineer to Government. It is not for me to offer an opinion on professional matters, but I enclose a copy of the last letter written by Mr. Norfor on the subject subsequent to the date of G.O. No. 2232 W dated 16th August 1897. It would be well to have these points finally settled before commencing the work.

Copy of a letter from the Executive Engineer, Tanjore, to the Superintending Engineer Vth Circle Madras dated 14th November 1897 No. 3821.

With reference to G.O. No. 2232 W/ 16-8-97, I have the honour to state that the work will be carried out as sanctioned, but I would beg to offer the following remarks on Mr. Jones' No. 633 dated 30th March 1897, published with the above quoted G.O.

and

and as I am the officer to execute the work, I consider it my duty to point out defects now and before the work is carried out to com -pletion.

2. In para. 2 Mr. Jones states that there is a valid reason against my proposal of raising the overflow level to 57.00; the reason ~~being~~ given being that the sewer would require to be more than full before the overflow comes into operation and that it would cuase an increase of pressure on the inside of sewer. I must confess I cannot follow his arguments. All I have proposed is to raise overflow level from 56.00 to 57.00 or but one foot which can -not possibly make or cause any appreciable increase of pressure in the inside of ~~pressure~~ sewer. The sewer even with overflow at 56.00 will flow more than full for almost its whole length (i.e. out of a total length of 1430 feet) of 1430 feet, it will flow more than full for about 1330 feet.

3. The ~~length~~ level of sewer at inlet to well is 49,00, that is (measured to centre of sewer. My proposal was to make the depth 7.75') there is a depth of water here of 6.75 ~~ft.~~. instead, because we can afford to do so, the levels of inlets to intercepting sewer ranging from 58.00 to 60.00 and therefore he could ~~it~~ easily raise level of sewer one foot if necessary. Besides as the overflow ~~level~~ level is 56.00 as fixed by Mr. Jones, and the M.S.L is 57.50, and as this ~~it~~ is a constant level during the N. E monsoon, this pressure (and more) which Mr. Jones wants to avoid must frequently happen, if the work is carried out as designed. Mr. Jones is altogether mistaken in supposing the maximum flood but seldom occurs, as he states in para. 3 . This is only the early part of September and the level of ~~the~~ water now stands at 56-40" or .40" above his overflow ~~of~~ level.

4. In my opinion the higher the overflow ~~of~~ level is fixed the better, or ~~in~~ other words the less chance there is of spill the better especially as there does not seem any ~~way~~ of preventing the mix -ture of filtered and unfiltered sewage.

5. I would draw your attention to my letter No.1992/10-5-97, wherein I pointed out that the channel for overflow and outlet if carried out as designed would be under water during almost the whole of the irrigation season; i.e it will be under water for 5

out

out of 12 months during which time there can be no baling of sewage.

6. Provided the banks of these channels are raised above M.L.E. I am not very keen on raising the overflow level to 57.00. If they are made as designed, they will be breached every year and will be an endless source of trouble; in fact these channels would be no longer channels or " discoverable " as such.

7. I am unable to follow Mr. Jones in the latter part of para. 3.

8. It was not my intention that the overflow channel banks only should be raised, but the outfall channel banks also. It would, of course, be useless raising one and not the other. I am of opinion that as the place where the well and ~~the~~ filter bed are to be built is a small tank in the irrigation season, no sewage water should be allowed in it, but that such water should be carried at once right away into a flowing stream, which could be done if my section of channel be adopted. There is also a pond close by. Why contamin-nate it unnecessarily? a point I omitted to notice in my previous letters, I now beg to notice, and that is that whatever section of channel is adopted it should not interfere with the drainage over which it passes and for this purpose, one or two earthenware pipes would be required.

9. Mr. Jones' plans have been drawn up without the point of water levels being considered at all, proved by the fact that he has not shown any water levels on them.

Endorsement of the Collector of Tanjore, Ref on Cur. No.250/M1 dated 8th January 1898.

Forwarded.

2. Since receiving the Chairman's letter I have inspected the locality, and have consulted the Executive Engineer Mr. Norfor who very kindly showed me the plans and explained the same. At my request he also consulted the Sanitary Engineer a few weeks ago when the latter passed through Tanjore, and I understand from Mr. Norfor that Mr. Jones sees the force of Mr. Norfor's objections to certain details of the scheme as at present drawn up and he will

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no doubt be glad to consider the objections if Mr. Norfor's letter No. 3821 dated 14th September 1897 to the Superintending Engineer is sent to the Sanitary Board. The letter was not forwarded to the Government as the Superintending Engineer considered it unnecessary to do so, Government having already passed final orders on the scheme.

3. The main objections raised by Mr. Norfor to the present scheme as disclosed in his letter of September, as well as -- I be-lieve -- in another letter to the Superintending Engineer, are the following:-

(1) Owing to the level of the surrounding paddy fields, and to the low level of the bank of the proposed channel, leading from the sewage filter, the sewage (unfiltered as well as filtered) will mix with the drainage from the surrounding fields, and much of the drainage water will be carried off in the channel meant for sewage alone, and -- what is far worse -- much of the sewage (un-filtered and filtered) will mingle with that drainage and conta-minate a pond close by and also (I have no doubt) make its way to many other places. This will happen not only during high floods but constantly for about six months, during every year of average rainfall.

(2) The surrounding drainage will during the rainy season frequently find its way into the sewage well, instead of the sewage finding its way from the well into the filter bed.

(3) The banks of the proposed channel from the filter bed will be subject to frequent breaches.

(4) The filtered sewage water -- mixed with much that is un-filtered as above noted -- will find its way into the " Varaka" a large masonry tank in the town. On the morning of my inspection I saw a number of people washing their clothes and bathing in this tank, and the Chairman informs me that people take this water home for cooking purposes, and ~~then~~ there is no guarantee that they do not drink it unboiled; in fact it may be assumed as pretty certain that they do. The Sanitary Commissioner has strong views as to the danger of cholera spreading from polluted tanks in which

people

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people bathe or wash, even if they do not drink the water. The Chairman also informs me that a section of the community attaches some importance to the tank on account of its sanctity. It appears to me therefore most unwise to execute a work which will result in polluting with sewage a tank, the water of which is used for bathing washing and domestic purposes. It might be urged that the tank should be absolutely closed to the public, but the extent to which any ~~magist-~~ magisterial order would be permanantly effective is problematical, and I see no need for polluting the tank at all, as Mr. Norfor proposes another way of carrying off the sewage, Viz ~~as~~ across ~~a~~ a channel whence it might be conveyed to another drainage channel, or--better still if possible -- to a sewage farm. Scarce-ly any of the correspondence has passed through my office, and I do not know if the Sanitary Commissioner is aware of ~~this~~ this last objection to the scheme.

4. As regards the Chairman's remark on the Vizianagram filter I agree to a very great extent with the Sub-Collector. When ~~I~~ I saw it a few weeks ago, even the filtered sewage emitted an offensive smell. Though that might be largely minimised in a manner suggested to me by the Civil Apothecary who was present, and I am writing to the Chairman to see if this can be done. The Vizianagram filter system, however, in ~~my opinion~~ any case, mitigates rather than removes the nuisance, and should not be taken as a satisfactory ~~a~~ substitute for a proper system of sewage drainage.

5. I beg to refer to the marginally noted references on the proposal of the Council to have schemes for the watersupply and drainage prepared at once. I do not know if this present scheme will fit in with the whole. If not, possibly the result might be that this scheme would, in the long run, be money and labour wasted. The Sanitary Engineer might be asked to consider this point, if he did not do so when he framed the scheme.

Kumbakonam Municipal Chairman's letters No. 760, dated 29th November 1897, and 772, dated 3rd December 1897 forwarded with my endorsement on cur. Nos. 339 & 347/ml of 97 dated 24th December 97 and 29th December 1897.)

6. Mr. Norfor has informed me that ~~that~~ the scheme does not provide

provide for flushing the drains. The Sanitary Engineer might be asked for his remarks on this point also.

7. In writing the above remarks, it should be borne in mind that I have written without any pretensions to understanding the scheme as a professional officer, and it may be that I have in some points misapprehended Mr. Norfor or the scheme itself, or I may have expressed myself in a very unscientific manner.

From the Sanitary Board, No. 265/S., dated 28th April 1898.

Read the following G.O.

noted.

G.O. No. 565 M. dated 14th March 1898.

From the Sanitary Engineer to Government No.365, dated 31st March 1898.

Resolution

In the first paper read above the Government refers to the Sanitary Board for remarks the proposals for a drainage scheme for the town of Kumbakonam made by the Chairman of the Muni-cipality and the observations thereon by the Sub-Collector and the Collector.

2. The Chairman refers to this matter in para. 65 of his report. He there says that the Council has resolved to raise a loan of Rs 35,000 for the purpose of carrying out the following among other Sanitary works.

(1) The sewage of (a) The Patnulgar quarter,

(b) SolayappaMudali street.

(2) Subsidiary drains leading to main drainage channels.

3. He proposes that filters and sewage farms be established in selected blocks of the town as funds become available; the blocks to be so arranged that they can be afterwards connected by underground pipes with a general sewage scheme.

4. The sub-Collector agrees with the suggestion of arranging separate blocks, and leaves to the Sanitary Department the duty of seeing that the detached schemes are not mutually inconsistent.

5. The Collector begs to refer to the wider question of the

investigation

investigation of water supply and drainage schemes dealt with in certain references to Government, which are not before the Sanitary Board, and adds that he does not know whether the survey and rough estimate for the Putnul portion of the town have been made so as to fit in with a general scheme or whether it provides for open drains or for pipes on the Mylapore drainage system. The matter is one which he considers should be referred to the Sanitary Board for remarks. There is no information on the subject in the Sanitary Board's office, but in para 3 of the Board's Proceedings No. 816/S dated 15th November 1897, the Sanitary Engineer was desired to take up the Putnul drainage scheme as soon as possible, and advise on it, in order that the Board may see whether it can work as a detached item of a general drainage scheme. He is requested to be so good as to report on this point as soon as possible.

6. As regards the Solayappa Mudali street drainage -- (1) (b) it is observed that in G.O. No. 2232 W, dated 16th August '97, an estimate amounting to ₹ 6250 was sanctioned for its execution by the Public Works Department but that the Executive Engineer (Mr. Norfor) subsequently raised some objections to the scheme. These were referred to the Sanitary Engineer who now forwards a report on the whole subject by the Assistant Sanitary Engineer after personal inspection of the locality in company with Mr. O' Connell the then Executive Engineer.

7. The report enters fully into the merits and defects of the scheme, and shows (para. 7) that it is not economical to deal separately with the drainage of this one street.

8. It would appear that these two sections would alone cost ₹ 31,250 and it is not certain that the detached schemes will work into a general scheme. The Sanitary Board considers that it is a great mistake to design works of this kind piecemeal and would advise that the Sanitary Engineer be directed to draw up a complete scheme for the drainage of Kumbakonam which when sanctioned, can be carried out piecemeal as the available funds permit.

Putnul ..	25,000
Solayappa Mudali st.	6,250
	31,250

From

From the Sanitary Engineer to Government, No.881, dated 29th April 1898.

With reference to para. No. 8 of the Sanitary Board's ~~re~~ resolution No. 265/S of 28th April 1898, I have the honour to call attention to this office letter to your address No. 234 dated the 16th February 1898, from which it will be seen that it is impossible for this office to undertake more schemes at present or for some-time to come. The water supply scheme for which the Kumbakonam Council granted funds is under survey and that will be proceeded with but there is no advantage whatever in taking up the two schemes of water supply and drainage together, the surveys and levels required for one and the other being of quite a different nature.

2. Apart from this fact it has been pointed out in this office letter No. 234 already referred to that the cost of a complete scheme for the drainage of Kumbakonam ~~work~~ would amount to some-thing like 17 lakhs, while the water supply scheme will cost 5 lakhs.

3. I therefore ask, is it on the bounds of possibility, that the Municipal Council even with the most liberal aid from Govern-ment, an aid which, in present circumstances, is unlikely to be tendered, will, within the next quarter of a century be liable to undertake both schemes ; I doubt if they will be able to undertake even the smaller one, the water supply.

4. Presuming that Government will concur in this view, it may then be asked whether the two particularly bad portions of Kumba-konam are to have no remedies supplied during a period which will certainly be long if not so long as stated.

5. Until the larger scheme is designed and for this ℔ 3000 is required, it is impossible to distinctly state whether the smaller schemes will fit in with it but my belief is that they will not and that they could not be arranged to do so.

6. It therefore seems to me and I ~~regret~~ regret to differ from the Sanitary Board that the proper course is to proceed with the small schemes where relief is urgently wanted.

7. Soliappa Mudali street has been delayed because of certain objections, and criticisms by the late Executive Engineer P.W.D but which as will be seen from the report of the Assistant Sanitary Engineer (vide para 6 of the Sanitary Board's resolution under reference) really do not affect the value of the scheme the only possible one and one approved by the Sanitary Commissioner.

8. As to the other scheme, it is being investigated, but it has only been taken up lately as opportunity permitted but looking to the opinion expressed in para 8 of the Sanitary Board's resolution I have withdrawn the officer who was investigating it from Kumbakonam. I would add that the Sanitary Board required the preparatinn of this Putnul scheme, which the Board now considers it would be a great mistake to design.

9. As constant change of policy leads to great expense and waste of labour, I have the honour to request that Government will be pleased to decide (1) whether the water supply now being investigated is to precede drainage investigation (2) whether the large drainage scheme is to be investigated at all (3) whether small schemes may not be prepared for temporary alleviation of the worst parts of the town and (4) whether the Soliyappa Mudali street scheme may not now be begun and handed over to this department for execution.

From the Sanitary Commissioner for Madras, No. 1127/S, dated 20th May 1898.

With reference to the resolution by the Sanitary Board No. 265 dated 28th April 1898 I have the honour to state that as, contrary to what I believe is in the intention of Government in reference to its functions, I was not consulted by that body before their advising Government upon so important a sanitary measure, I wish to place the following opinion upon record, founded upon such evidence as is available to me.

2. I consider that the introduction of a water supply scheme into Kumbakonam is of the first sanitary importance.

3. The introduction of a sewage scheme is also of importanee but if, on account of financial conditions, only one scheme be feasible at present, that for water supply certainly should have the preference. Pending the possibility of introducing a correct sewage scheme in any part of the town, I believe the proposal of the Chairman to form small cultivation plots and to use sewage filtration at certain points, judicious and suitable and in accord with the best sanitary teaching; but such methods should be effected in a mere make-shift manner and have no relation to any future general schemes. Under one condition only would I approve of the method of using partial schemes to be ultimately joined up as suggested by the Board, namely, if conservancy be combined with this scheme as the primary point sought so as to serve the entire town. This in Kumbakonam would be possible by the use of the Shone's pneumatic system combined with pial depots. From consultation with Mr. Ault on the adaptability of the Shone's system of sewage for conservancy as the prime object with the gradual addition of sewage as parts of the town are drained, I believe that this method could be worked out with economy and would suit native requirements.

Order No. 1253 M.Mis., dated 12th July 1899.

The Government considers that the preparation of the water supply project should be proceeded with first and that it would be quite useless to design a general scheme for the drainage of the town, as the Municipal Council cannot in the near future undertake the execution of such a project the cost of which is roughly estimated by the Sanitary Engineer at 17 lakhs. There does not appear however appear to be any reason why small schemes of drainage for the worst parts of the town should not, in the mean-time be taken up and carried out as funds become available, seeing that even if such schemes do not work in with a general drainage scheme, the benefit derivable from their existence for the long interval which must elapse before a general scheme can be executed will justify the expenditure incurred upon them. The scheme for

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the drainage of the Solayappa Mudali street should therefore be put in hand by the Public Works Department, as soon as the Municipal Council can provide the necessary funds, and when this work has been completed, the Council should, under section 213 A of the amended Municipal Act, compel the owners of those houses in the street, which are not provided with drains, to connect their premises with the new drains.

(True extract)

for Secretary to Government.

To

The Chairman, Municipal Council, Kumbakonam,
thro' the Collector of Tanjore.
,, Sanitary Board.
,, ,, Commissioner.
,, ,, Engineer
,, Public Works Department.