

Public Works (1899) Department.

G.O., No.

232 W

DATED

25 Jan 1899.

[Despatch Abstract.]

Drainage

Pro: L the Dept - Approving, with comments, the Estimate of Rs 33440 for a Scheme of - for the Drainage of the Sanitary Board - ordering the publication in the Fort St. George Gazette of the Application of the Municipal Council for sanction to raise a loan of Rs 33,000 in the open market, commencing to an S.E. circle.

Approving, with remarks, the estimate of Rs. 33,440* for a scheme of — for the Tanjore Fort submitted by the Sanitary Board, and ordering the publication in the Fort St. George and Tanjore District Gazettes of the application of the Council for sanction to raise a loan of Rs. 33,000 in the open market.

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30/11/69

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—again the following paper:—

G.O., Mis. No. 2775 M., dated 11th December 1897.

Read—the following papers:—

Proceedings of the Sanitary Board, No. 730-S., dated 26th October 1897.

Read—letter from the Sanitary Engineer to Government, No. 1521, dated 18th September 1897.

Resolution—No. 730-S., dated 26th October 1897.

With his letter read above, the Sanitary Engineer submits plans and estimates for the Tanjore (Fort) drainage improvements. The scheme is described in paragraphs 3 to 8 of the report. It is much cheaper than any other scheme which has been proposed, and if attention be paid to the open drain, it will, in the opinion of the Sanitary Board, prove effective.

2. The total cost is estimated at Rs. 33,440 and, should Government be able to grant half this sum and lend the remainder at $4\frac{1}{4}$ per cent., the annual cost for interest to the Municipality will amount to Rs. 710. To this sum has to be added the cost of permanent establishment, Rs. 60 per mensem. The receipts for the sewage farm are estimated at Rs. 3,300 annually.

3. It would thus appear that the financial prospects are good, and that, under proper management, the scheme is likely to be a source of profit to the Municipality even if the whole capital is borrowed at $4\frac{1}{4}$ per cent.

4. The Sanitary Board accordingly recommends the scheme for the sanction of Government.

(True Extract.)

(Signed) R. PARSONS,
Secretary Sanitary Board.

To the Secretary to Government, Local and Municipal Department.

From J. A. JONES, Esq., MEM. INST. C.E., F.R.S.E., Sanitary Engineer to Government, to the Secretary, Sanitary Board, Chépák, dated Fort St. George, 18th September 1897, No. 1521.

Circumstances having prevented the programme of work as laid down in G.O., No. 252 M. dated 19th February 1897, being completed owing to the facts given in my No. 1224, dated 16th July 1897, addressed to the Secretary to Government, Local and Municipal Department, and sent through you, I have been able to proceed with the design and estimates for the Tanjore (Fort) drainage improvements, and these I have now the honour to forward with a report on the scheme and other papers and plans as detailed below.

ENCLOSURE.

Report on proposed Improvement of Drainage of Tanjore.

The sewage from the Fort at Tanjore is disposed of by delivery on to small farms in or adjacent to the various outlets, and such farms are in or adjacent to the Fort ditch on the north of the town. Sewage farming is not carried out as it ought to be and only a minor part of the sewage is used while the remainder flows by various outlets to tanks to the Vadavar or until lost in the earthen ditch through which it flows. The Sanitary Commissioner having recommended that matters should be put on a proper footing, Government ordered that an estimate of cost be prepared; the Council supplied funds for the necessary levels, &c.

2. The scheme to which the accompanying plan and estimate refer includes—

(1) The alteration and regrading of the drains in East Main street and East Gate street and adjoining streets so that all sewage from this locality and the sewage from the main drain may be carried to the head of one of the intercepting sewers hereafter described.

(2) The construction of two intercepting sewers collecting the sewage from the various existing drains discharging into the Fort ditch.

(3) The provision of a pumping station and delivery main.

(4) The construction of a sewage farm.

3. The population of the Fort at Tanjore is about 20,000. The total drainage provided for is 3,00,000 gallons, one-half flowing off in 6 hours or at the rate of 416 gallons per minute.

The manner in which it is proposed to regrade the street drains near East Gate street is shown in the accompanying section.

The two intercepting sewers with gradients of 1 in 140 (east sewer) and 1 in 190 (west sewer) can discharge 218 gallons and 185 gallons per minute, respectively. This is less than the total amount, but a portion of the sewage will be received at North Gate street opposite the pumping station. The manholes as shown will be built up to above the entrance level of the sewers. The sewers will receive the drainage from the East Main and West Main streets at their upper ends and at their junction from a small area flowing in at North Gate street.

The sewers discharge into a well situated outside the proposed engine house to the north of the Fort ditch. The size of the engines and the cost of the pumping main is dependent on the site of the sewage farm.

If the sewage farm is placed to the east, the lift will be only 12 feet and a gravitation pipe of stoneware 9" diameter can be used. If the sewage farm is on the west the main will be under pressure and 7" diameter iron pipe is necessary.

The objection to locating the farm to the east is that the land is flooded on occasions of rainfall and is below the flood levels of the Vadavar. The ordinary flood level of this channel is 131.80, the maximum flood level is 134.74, while the average level of the proposed sewage farm area is 129.00. This, it is believed, is the land proposed for the sewage farm by the Sanitary Commissioner.

The only other suitable area for sewage farming is that to the west on to which the greater portion of the sewage now discharges and is shown on the plans. A large portion of the area is waste land, the remainder irrigable land. It is located so that it can be easily drained and the effluent sent to a branch of the Vadavar.

The area available for the farm on the west is not limited, that to the east cannot exceed 25 acres. It is proposed to take up on the west an area of 40 acres, thus allowing for the sewage at 15 gallons per head of 500 persons per acre; as it is proposed to underdrain the farm, this will be sufficient. It is proposed to place a sewage storage tank at the higher end of the site. A design this accompanies:—

Estimates.

The total of the estimates is—		RS.
Farm to the west		68,400
Do. east		45,700

No. 2176 M., 16TH DECEMBER 1898.

These might be reduced by the omission of 12" and 6" tiles for the main and sub-carriers, earthen channels being alone used, and by the omission of the sub-soil drainage pipes of which I doubt the possible efficacy in this country. If the former are omitted the reduction would amount to Rs. 10,350 in the former and Rs. 4,340 in the latter amount.

4. The plans are self-explanatory of the proposals made.

5. The annual cost to the municipality would depend on the amount of the Government grant and the working charges. The cost of pumping to the farm on the west would be about Rs. 3,000 annually, on the east Rs. 840 annually, and allowing Rs. 1,000 for working the farm in each case—the cost would be (taking the Government grant as 50 per cent.)—

RS.		RS.
$\frac{68,400}{2} \times 5.96$ per cent.		
Pumping		2,038
Farm		3,000
		1,000
	Total ..	6,038
$\frac{45,700}{2} \times 5.96$ per cent. ..		
Pumping		1,360
Farm		840
		1,000
	Total ..	3,200

6. Government desired in G.O., Mis. No. 291 M., dated 26th February 1895, that the matter should be considered in consultation with the Municipal Council. After the Sanitary Board has decided as to the plans to be adopted or any modification thereof, these as well as the estimates may be sent to the Municipal Council for remarks.

Order—Mis. No. 2775 M., dated 11th December 1897.

The plans and estimates will be forwarded to the Municipal Council of Tanjore for remarks and for report as to how it proposes to find the required funds for carrying out the work and for meeting the annual expenditure which its execution would involve. The Government is not prepared to make any grant or loan from Provincial funds on account of this work, but would sanction the raising of a loan in the open market.

(True Extract.)

(Signed)

H. TREMENHEERE,
Secretary to Government.

To the Chairman, Municipal Council, Tanjore, through the Collector.
,, Sanitary Board.

Read—also the following papers:—

From M.R.Ry. V. APPASWAMI VANDAYAR Avargal, Chairman, Municipal Council, Tanjore, to the Secretary to Government, Local and Municipal Department (through the Collector of Tanjore), dated 15th March 1898, No. 553.

With reference to G.O., Mis. No. 2775 M., dated 11th December 1897, I have the honour to state that the scheme for the drainage improvement of Tanjore Fort was approved *nem-con* by the Council at its meeting held on the 25th February 1898. The Council has also resolved by a large majority that the funds necessary for the purpose be raised by a loan in the open market. I therefore beg to request that the Government will be pleased to accord sanction to the raising of the loan. An extract of the resolution is herein enclosed for information.

No. 2176 M., 16TH DECEMBER 1898.

No. 2907-Rev.

Submitted to Government in the Local and Municipal Department.

2. A formal application for loan not having been submitted along with the letter, the same was obtained upon further reference and is forwarded herewith.

3. The application provides for repayment of the loan in 30 years. As the council is already indebted to Government to the extent of Rs. 1,89,500, it cannot be expected to repay the proposed loan in 20 years.

(Signed) M. SIVAGNANAM PILLAI,
for Ag. Collector.

5th July 1898.

Reference No. 879.

The Municipal Council has not reported how it proposes to meet the annual expenditure which the execution of the scheme would involve, as required in G.O., Mis. No. 2775 M., dated 11th December 1897. This omission should be supplied without delay.

2. The rate of interest which the proposed loan is to bear should also be reported.

(Signed) H. TREMENHEERE,
Secretary to Government.

29th July 1898.

To the Chairman, Municipal Council, Tanjore
(through the Collector).

From M.R.Ry. V. A. VANDAYAR, Chairman, Municipal Council, Tanjore, to the Secretary to Government, Local and Municipal Department (through the Divisional Officer, Tanjore), dated 27th September 1898, No. 1678.

With reference to your memorandum No. 879, dated 29th July 1898, I have the honour to forward herewith an extract of the Council's Proceedings, dated 14th instant, from which it will be seen that the annual expenditure which the execution of the drainage scheme would involve will be met from the expected profits from the scheme and that the rate of interest on the proposed loan is 4 per cent. per annum.

Ref. C. No. 1986.

Forwarded.

(Signed) C. MURUGESAN,
Deputy Collector.

29th September 1898.

Endt. on C. No. 518-Ml.

Forwarded.

(Signed) J. TWIGG,
Ag. Collector.

15th October 1898.

ORDER—No. 2176 M., dated 16th December 1898.

The estimate amounting to Rs. 33,440 for a scheme of drainage for the Tanjore Fort, submitted by the Sanitary Board, is approved.

2. The Public Works Department is requested to put the work in hand as soon as the necessary funds are provided by the Municipal Council.

3. The application for sanction to raise a loan of Rs. 33,000 in the open market, submitted with the Chairman's first letter read above, will be published in the Fort St. George and the Tanjore District Gazettes. After the lapse of one month from the date of its publication, if no valid objections have been taken thereto, the application will be sanctioned.

4. The Collector is requested to report the date of publication of the application in the District Gazette.

(True Extract.)

A. Edgington
for Secretary to Government.

To the Chairman, Municipal Council, Tanjore.
" Collector of Tanjore.
" Sanitary Board.
" Public Works Department.
Gazette.

STATEMENT showing the Revenue and Expenditure of the Tanjore Municipality for three years from 1895-96 to 1897-98.

1895-96	1896-97	1897-98	
Rs. 1,21,454	Rs. 70,722	Rs. 50,433	Receipts.
12,478	10,823	8,129	Balance brought forward
24,792	21,892	25,658	Tax on Arts
10,350	12,178	13,717	Tax on Buildings and Lands
3,862	3,720	3,529	Water-tax on Buildings and Lands
2,410	2,300	2,124	Tax on Vehicles and Animals
16,806	17,027	17,024	Tax on Carts
65	125	110	Tolls
3,902	3,468	2,770	Realizations under Special Acts
2,231	2,242	2,232	Rent of Lands, Buildings, &c., and Sale-proceeds of Lands, &c.
14	26	20	Conservancy Receipts
7,349	9,097	9,606	Fees and Revenue from Educational Institutions
887	856	849	from Medical Institutions
1,538	1,959	1,705	Income from Markets and Slaughter-houses
1,546	386	624	License Fees
98	49	147	Other Fees
237	230	325	Fines under Municipal and other Acts
1,450	7,187	5,714	Interest on Investments and premium on Loans
380	995	179	Grants and Contributions from Government
301	1,516	314	Recoveries for Services to Private Individuals
			Miscellaneous
			Loans
			Advances Recovered
2,12,150	1,66,526	1,45,209	Total
			Expenditure.
1,369	2,555	1,449	GRANT I—
1,074	3,462	921	New Works—
1,662	1,076	1,403	Communications
54,978	12,041	3,919	Buildings
911	1,272	415	Drainage
			Water-supply
			Miscellaneous
9,405	6,268	10,341	Repairs—
997	1,323	1,691	Communications
3,949	3,460	3,066	Buildings
9,188	17,425	16,369	Drainage
787	801	801	Water-supply
50	96	37	Establishment
			Tools and Plant and other Stores
84,370	49,779	40,412	Total

Exd. C. M. Thambaswamy.

[Annexure.]

ANNEXURE.

APPLICATION for loan by the Municipal Council of Tanjore for improving the drainage of the Tanjore Fort and for opening a sewage farm in connection with it.

The work or works for the construction or repair of which the loan is required and an estimate of the cost thereof.	The amount which it is proposed to borrow.	The fund or funds on the security of which it is proposed to borrow.	The law or laws under which the said fund or funds is or are levied, received or held.	The dates between which the money borrowed is to be received.	The term of years for which the money is to be borrowed, the instalments, if any, in which it is to be repaid, and the amount of sinking fund, if any, provided for its repayment.	A detailed account of the revenue expenditure of the local authority for the last three preceding years.	All existing prior charges upon the funds of the local authority.
Improvement of the drainage of the Tanjore Fort and the opening of a sewage farm in connection with it, estimated to cost Rs. 33,440.	Rs. 33,000	Tanjore Municipal fund.	The Madras District Municipalities Act IV of 1884 as amended by Act III of 1897.	Between October 1898 to 31st March 1899.	The term of years for which the money is to be borrowed is 30 years. The principal will be repaid in 25 annual instalments beginning from 1st April 1905 of Rs. 1,320 each.	Attached herewith.	Rs. 1,89,500 at 4½ per cent. borrowed from Government and repayable in 30 annual instalments beginning from the year 1895.

STATEMENT showing the Revenue and Expenditure of the Tanjore Municipality for three years from 1895-96 to 1897-98.

	Actuals, 1895-96.	Actuals, 1896-97.	Actuals, 1897-98.
Receipts.	Rs.	Rs.	Rs.
Balance brought forward	1,21,454	70,722	50,433
Tax on Arts	12,478	10,823	8,129
Tax on Buildings and Lands	24,792	21,892	25,658
Water-tax on Buildings and Lands	10,350	12,178	13,717
Tax on Vehicles and Animals	3,862	3,720	3,529
Tax on Carts	2,410	2,300	2,124
Tolls	16,806	17,027	17,024
Realizations under Special Acts	65	125	110
Rent of Lands, Buildings, &c., and Sale-proceeds of Lands, &c.	3,902	3,468	2,770
Conservancy Receipts	2,231	2,242	2,232
Fees and Revenue from Educational Institutions	14	26	20
from Medical Institutions	7,349	9,097	9,606
Income from Markets and Slaughter-houses	887	856	849
License Fees	1,538	1,959	1,705
Other Fees	1,546	386	624
Fines under Municipal and other Acts	98	49	147
Interest on Investments and premium on Loans	237	230	325
Grants and Contributions from Government	1,450	7,187	5,714
Recoveries for Services to Private Individuals	380	995	179
Miscellaneous	301	1,516	314
Loans			
Advances Recovered			
Total	2,12,150	1,66,526	1,45,209
Expenditure.			
GRANT I—			
New Works—			
Communications	1,369	2,555	1,449
Buildings	1,074	3,462	921
Drainage	1,662	1,076	1,403
Water-supply	54,978	12,041	3,919
Miscellaneous	911	1,272	415
Repairs—			
Communications	9,405	6,268	10,341
Buildings	997	1,323	1,691
Drainage	3,949	3,460	3,066
Water-supply	9,188	17,425	16,369
Establishment	787	801	801
Tools and Plant and other Stores	50	96	37
Total	84,370	49,779	40,412

Statement showing the Revenue and Expenditure of the Tanjore Municipality for three years
from 1895-96 to 1897-98—cont.

		Actuals, 1895-96.	Actuals, 1896-97.	Actuals, 1897-98.
Expenditure—cont.		rs.	rs.	rs.
GRANT 2—				
Training Schools		51	120	171
Municipal Schools on the Salary Result System		953	987	1,491
Salary Grants		1,664	2,420	2,426
Result Grants		5,069	6,000	5,002
Building, Furniture, &c., Grants		96	420	299
Inspection		374	366	380
Miscellaneous		458	453	418
Total		8,665	9,766	10,217
GRANT 3—				
Hospitals and Dispensaries		3,624	3,647	3,558
Contributions		631	665	649
Vaccination		600	581	843
Registration of Births and Deaths		598	531	543
Conservancy		12,534	14,683	18,361
Total		17,927	20,107	23,454
GRANT 4—				
Lighting		4,079	4,727	5,352
Markets and Slaughter-houses		579	775	202
Travellers' Bungalows		376	176	174
Avenues		335	330	359
Public Gardens, Survey of Land, Clock Tower and other charges		3,118	9,781	6,986
Total		8,487	15,789	13,073
GRANT 5—				
Supervision and Management		7,252	6,402	6,906
Repayment of Debt		6,317	6,317	6,317
Interest on Loan		7,829	7,755	7,517
Advances Recoverable		393	308	347
Refunds		83	68	291
Pensions and Gratuities		105	72	..
Balance		70,722	50,433	36,675
Grand Total		2,12,150	1,66,826	1,45,209