

24-7-24 B17 ✓

25-1-07

[L. & M.]
5,000-2-4-100

Local & Munl. (1897) Department.

MISCELLANEOUS.

G.O., No. 1615/11
DATED 31/10/97

[Despatch Abstract.]

Sanitary Water Supply Scheme

Forwarding to the Municipal Council of
Mumbai the plans and estimates of —
for remarks & for report as to how it
proposes to finance the scheme now
recommended by the Sanitary Board
& requesting the Sanitary Engineer to
report the probable cost of carrying out the
work of keeping the Northern Fresh Channel
from contamination from the station yard.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C.O.	3091	h/99					
C.O.	4262	100 = 938100					

Local & Munl. (1899) Department.

CURRENT No. 2601



Again go to 12 band 4th September 99
 Fero 2601 m/99

Order No. 1615 m/99
 31-10-99
 30-10-99

From The Secretary,
 Sanitary Board

No. 534/S

The plans and estimates will be forwarded to the Municipal Council of Guntur for remarks and for report as to how it proposes to finance the scheme now recommended by the Sanitary Board.

2. The Sanitary Engineer is requested to report, in the meantime, the probable cost of carrying out the work referred to in para. 5 of the Sanitary Board's Proceedings read above.

Dated 2-10-99

Received 5-10-99

Registered 6-10-99

Enclosures San: Cur. No 485/99 etc
 Encls. 15 (1 plan) + one set of plans
 Spare copies

SUBJECT.

Guntur water supply:-
 Accepting the scheme for already sent up to Govt.

V.R.
 18/10/99

21. x 99

The scheme is too expensive & cannot be carried out without very large assistance from Government. But the Municipal Council may be able to do up some thing less expensive.

To The Chairman, The Guntur thro the Col. of Krishna
 with plans & estimates & copy of 180.10.12 band 4th 99
 a San. Board
 a San. Engineer

11/10

G.O.	No.	Department.	Date.
G.O.	1262	In Inis	4. 9. 99
"	1031	In S.C.	20. 7. 99.
"	201	In S.C.	15. 2. 99
"	2165	In S.C.	15. 12. 98.
"	76	In S.C.	21-1. 99.
"	1863	In Inis	3-12-94
"	438	In S.C.	3. 4. 94.

G O.	No.	Department.	Date.

SANITARY BOARD OFFICE.

PROCEEDINGS OF THE SANITARY BOARD, No. 534/S DATED 2 Octr. 99

LOCAL & MUNICIPAL DEPT.

CURRENT NO. 2601m

again
READ the following:

Proceedings of the Sanitary Board, No.

437 S. dated 17 August 1899.

Proceedings in the Local and Municipal
Department, No. 1262 Ki Kiis: dated 4 September '99

Read also the following:-

Letter from the Sanitary Engineer, No.
1233, dated 20th September 1899.

Resolution.

In accordance with G.O. 1262 M. No. dated 4 September 1899, the Sanitary Engineer submits a plan and estimate amounting to Rs. 17,300 for digging a trench about 3400 feet long across the Gungalapalliam Valley, at the foot of the Koudaviden Hills, for testing the yield of sub soil water, as recommended in para 8 of the Proceedings of the Sanitary Board, No. 431/S, dated 17 August 1899. The estimate also includes the cost of pumping for 5 months.

2.

The Assistant Sanitary Engineer
recommends

recommends that a small length of about 300 feet be excavated in the first instance as an experiment to prove the absence or scantiness of water; and, if the indications are unfavourable in this length, that the work should be stopped.

3. The Sanitary Engineer doubts the propriety of the proposed expenditure on the ground that the yield from below is no fair indication of the supply obtainable from the area commanded.

4. The further inquiry now made seems to show that the conditions are not sufficiently favourable to warrant the expenditure of any money in investigating an infiltration scheme.

5. The Sanitary Board accordingly resolves to accept the Scheme already sent up to Government with the proviso that the Northern Feeder Channel should be realigned, if possible, so as to avoid contamination from the Station yard.
(True Extract)

N. Parson S.
Secretary.

To The Secretary to Government,
Local & Munl. Dept., with papers in origl (1 roll of plans)
" Sanitary Commissioner.

Local & Munl. (1899) Department.

Sanitary CURRENT No. 485.

From The Sanitary Engineer
Order

No. 1233

Dated 20th September 1899
Received { 22-9-99
Registered {
Enclosures { Plan - 1 } Total 15
 { Twelve } others - 143 and one set of plans
Spare copies

A roll of plans
sent separate
H.L.

SUBJECT.

Counter Water Supply

Forwarding with observations a note and estimate for experimental trench at the foot of the Kondavichu Hill range for testing yield of subsoil water.

reco
300
as
sc
a

1981 e

BACK PAPERS

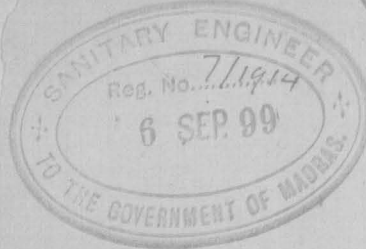
G.O.	No.	Department.	Date

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Sanitary Current No. 1
Recd. 24th March
Encls 6 a
1204/16

1899



From

The Sanitary Engineer to Govt.

No. 149 dated 25 April 99.

No. 372

Referred to the Sanitary Commissioner who is requested to be so good as to favour the Sanitary Board with any remarks that he may have to offer on this scheme.

Dated 23rd } March 1899
Encls: 7 (1 Book of Plans).

(By Order)

C. Gordon S.
Secretary, Sanitary Board.

Subject

To the Sanitary Commissioner
with papers in original
and 1 roll of plans.

Quaternary Water Supply Scheme

Submitting plans, estimates
and report relating to the

Enclosure to letter No. 1233 of 1897

1
2601/m/99

S. E. 1,000-17-1-99.

No. 372

GOVERNMENT OF MADRAS.

OFFICE OF SANITARY ENGINEER,

Poonamallee Road (Park Town),

Madras, 23rd March 1899.

From

J. A. JONES, Esq. MEM. INST. C. E., F.R.S.E.,

SANITARY ENGINEER TO GOVERNMENT,

To

The Secretary, Sanitary Board,

Madras.

SIR,

I have the honor to forward herewith plans, estimate & report relating to a scheme for the supply of water to Guntur.

2. The scheme has been prepared by the Asst. Sanitary Engineer on the basis laid down by Mr. Russell when Acting Sanitary Engineer after a thorough inspection of the area around Guntur and has been drawn up under my supervision.

3. I rather fear that the scheme, as it stands, is beyond the means of the Council unless it is prepared to accept the maximum taxation under the existing Act and then only with aid by Government to the amount of 50 %.

4. It is unlikely that Government can make any grant at present and meantime the scheme might be placed before the Council so that their views might be obtained as to the probability of their financing the scheme when Govt. is able to make a grant and for any remarks they may offer in view to a reduction of cost. The major part of the cost is due to the necessity for a large tank and to the extensive area from which the supply has to be collected and also to the long delivery main none of which items seem capable of reduction.

As shewn it is really not a very much more expensive scheme than the Kurnool one, but the latter scheme being a pumping scheme the expense of working that scheme at first start is much less owing to the maximum supply of water not being used.

I have the honor to be,

Sir,

Your most obedient servant,



Sanitary Engineer to Government.

No. 1691
S

NOTE by the Sanitary Commissioner for Madras, dated 20th Jan

Reference.— Endorsement No: 149/S dated 5th April 1899 by the Sanitary Board.

I have personally examined the area. I consider a subsoil water scheme would have been feasible. Having regard to the general trend towards the sea from the range of hills immediately beyond the Kondipadu-the Satanapalli Range - it need not be thought the subsoil water that would have been tapped would have been solely of local origin. Still, I think the preference for a surface water scheme is wise; as the chances are the supply would have been very hard. But the fact I have stated may I think be of some importance, with reference to the total yield of the drainage area of the proposed scheme. Thus, the Pottur and Yengalayapolium streams although bringing with them the surface drainage of the selected area are also the lines of springs which make their appearance at intervals. As a result of additions during the rains to the subsoil water, it may be held that long after the surface water has passed along the beds of these streams, springs will yield their supply.

2. It seems to me that the Northern feeder channel is badly placed, seeing that for a considerable part of its course

As shewn it is really not a very much more expensive scheme than the Kurnool one, but the latter scheme being a pumping scheme the expense of working that scheme at first start is much less owing to the maximum supply of water not being used.

I have the honor to be,

Sir,

Your most obedient servant,



Sanitary Engineer to Government.

San. 14/2/99

10/2601/m/99

2/2236/m/99

No. 1691/S

NOTE by the Sanitary Commissioner for Madras, dated 20th Jan

Reference.— Endorsement No: 149/S dated 5th April 1899 by the Sanitary Board.

I have personally examined the area. I consider a subsoil water scheme would have been feasible. Having regard to the general trend towards the sea from the range of hills immediately beyond the Kondipadu-the Satanapalli Range - it need not be thought the subsoil water that would have been tapped would have been solely of local origin. Still, I think the preference for a surface water scheme is wise; as the chances are the supply would have been very hard. But the fact I have stated may I think be of some importance, with reference to the total yield of the drainage area of the proposed scheme. Thus, the Pottur and Yengalayapolium streams although bringing with them the surface drainage of the selected area are also the lines of springs which make their appearance at intervals. As a result of additions during the rains to the subsoil water, it may be held that long after the surface water has passed along the beds of these streams, springs will yield their supply.

2. It seems to me that the Northern feeder channel is badly placed, seeing that for a considerable part of its course

5. It passes along a public road, and is so arranged as
to include the Satanapalle Railway station and its inhabited
buildings-porter's lines, Station-Master's house and passen-
ger latrines. In addition, this feeder also at present in-
cludes surface washings from an area inhabited by over 2000
coolies engaged upon granite quarrying. This nuisance can,
however, be got rid of. Again, the area includes the whole of
a road. Diversion of the last named road would apparently be
an easy matter, and I presume a different line of channel so
as to avoid the other difficulties mentioned can be arranged,
without important sacrifice of drainage area.

3. The drainage includes small plots of cultivated
dry land, and also a small portion of paddy land. All culti-
vation of any sort ~~must~~ ^{shall} be stopped within the area.

4. Nothing appears on the estimate for cutting the
turf, and vegetation from the bottom of the proposed tank.
This is essential.

5. If the details above enumerated be attended to, the
area must be regarded as reasonably clean; consequently, al-
though filtration would improve the quality of the water,
and I should like on this account to see it used; it need not
be regarded as essential if there be any doubt about the
possibility of providing the full funds. In the event, con-
sequently, also the service Reservoir could be dispensed with.

6. Preferably, the whole catchment area should be
acquired

acquired by the Municipality, or, if this be not feasible, it
should throughout be classed as forest reserve.

7. It is necessary to be able to run to waste the
lower layers of the water in this description of impounding
reservoir-especially during the first period of its use. It
is possible that the designer has duly included this power
of running to waste in his outlet sluice; but, as no mention
is made of the fact, attention should be directed to it.

8. Grounds are given for placing the filter beds in
the position suggested, but, considering the long line of pipe,
it would seem desirable in this case to keep the filter bed
and service reservoir close to each other. This, I say, in
reference to the possibility of "in-suction" even in pipes
under pressure-a factor that must be considered, if the pipe
is to pass, as conventionally represented, through "paddy
fields". Indeed, both for the sake of the better wear of the
pipe, and the avoidance of the chance of "insuction", I would
advise that very decided efforts be made to avoid taking the
pipe through such fields.

9. In regard to the sand for the filter, its "effective
size" should be specified after examination of locally avail-
able sands.

10. Purposely, no compensation has been provided for land when
the pipe passes through cultivated fields. This, I think, is
undesirable. The line should be reserved by the Municipality

Sanitary Engineer No. 303.

Recd. 22nd June 99

so as to have the right of their entry at any time, crops or
no crops.

11. A bye-pass is provided at the service reservoir, but not
apparently at the filter bed. Hence, in cases of fire, it would
not be possible to get any water but that which has been fil-
tered, when the bye pass at the service reservoir would be of
no use except during repairs.

12. It seems to me that the trouble as to Arundelpet
not getting water during low levels in the reservoir could
be avoided, by dividing the service reservoir into two parts-
keeping the part supplying Arundelpet always full, and letting
it overflow by a balance valve into the town portion of the
reservoir. This could be arranged without interfering with
the two sides being mutually dependent for supply of the
during repairs
whole town. I note that a second service reservoir is suggested
later on-but this would avoid difficulty in the meantime.



W. B. King
Lieut-Colonel, I.M.S.,
Sanitary Commissioner for Madras.

2

The Secretary, Sanitary Board

*with file of papers and
one plan returned.*

Enclosure to letter No. 1233 of 1899

2236/m/99

S. E. 1,000-17-1-99.

No. 1233

GOVERNMENT OF MADRAS.

OFFICE OF SANITARY ENGINEER,

Poonamallee Road (Park Town),

Madras, *20th September 1899.*

From

J. A. JONES, Esq. MEM. INST. C. E., F.R.S.E.,

SANITARY ENGINEER TO GOVERNMENT,

To

The Secretary to Government,

Local and Municipal Department,

Through

The President, Sanitary Board.

SIR,

80074/5 48-9-99
With reference to the G.O., No. 1262 M Mis., dated 4th
September 1899, I have the honor to forward a note prepared
by the Assistant Sanitary Engineer in reference to the re-
quest contained in the Government order quoted.

2. To that note I would add the following remarks.

3. The amount of water which can be obtained from the soil
is only a small portion of what falls on the area commanded.
If a trench is made as proposed, it will command an area as
stated viz., 1.66 sq. miles-because water cannot be drawn
through a mass of rock such as the Kondavidu Hills which may
bound the area in that direction and if the surface rainfall
from an area of 9 sq. miles is not thought to be sufficient,
it is not understood on what grounds it is thought that suffi-
cient water can be obtained from the smaller area and after
only a portion of the rain-fall say 10 to 60% over that less
area has penetrated the soil.

4. There is the further objection that the percolation is
very irregular, there would be none for many months before
rain-fall and a very great ^{pro} portion immediately after it,
therefore even if the probability of obtaining sufficient
water were assumed the storage area required would be very
great.

5. I therefore think that before expenditure is incurred in the direction proposed in the consideration is desirable, but as required I forward an estimate showing what the cost of an experiment would be.

6. The original papers and a roll of plans which accompanied the G.O., quoted above are herewith returned.

I have the honor to be,

Sir,

Your most obedient servant,



Sanitary Engineer to Government.

Given for copying
d
nined
ed 3/11

189

G.O., No. , DATED

No.

REMARKS TO C. No.

OF GOVERNMENT

OF GOVERNMENT.

WITH DITTO.

NOT FILLED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B.-

- A = Copy in full.
- B = Not to be copied
- F = Copy abstract only.
- Q = Copy heading only.

ment.

Initials of
attender.

16
2601/21/99