

Local & Munl. (1896) Department.

MISCELLANEOUS.

G.O., No. 1506 *hms*

DATED 5-9-96

INDEXED.

[Despatch Abstract.]

Anantapur Tank

Communicating to the Munl. Council, Anantapur, with
ackmt. L.P.O. P.B.D., Communicating to the L & M. Depart.
note by the Chief Engr. for Irrigation on the supposed
soil flow from — and the improvement of the
sanitary condition of that town with an expression
of concurrence in the conclusions arrived at by the
officers.

BACK PAPERS.

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

FURTHER PAPERS.

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

[L. & M.
500-5-8-96.]

Local & Munl. (189^b) Department.

CURRENT No. 2377 W

C.S.
Misc.

Order No. 15067. Misc. 8/5-9-96.

Communicated to the
Municipal Council, Aguascalientes,
whose attention will be drawn
to the suggestion made by the
Chief Engineer for Irrigation
in the last paragraph of
his note.

From
The Public Works Department

No. 2271 W.

Dated 7-8-96

Received 20-8-96

Registered 20-8-96

Enclosures 16

Spare copies 6

SUBJECT.

Communicating to the Local and
Municipal Department note by the
Chief Engineer for Irrigation on the
supposed sub. soil flow from Ancon-
tapur tank and the improvement
of the sanitary condition of that
town, with an expression of con-
currence in the conclusions arrived
at by that officer.

To the Chairman, M.C. Aguascalientes.
" Sanitary Commissioner
" Public Works Department
(with enclosures returned)

Dated 7/9/96

BACK PAPERS.

G.O.	No.	Department.	Date.
G.O.	1091	Public Works	1-7-96

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 2271 W., 7TH AUGUST 1896.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

Note by the Chief Engineer for Irrigation.

In accordance with G.O., No. 1614 W., dated 28th May 1896, relative to the measures to be adopted in improving the sanitary condition of Anantapur, I proceeded to that town on the 13th instant and inspected it, and the adjacent tank, in company with the Chairman of the Municipality, Mr. Somers-Eve, the Executive Engineer, and Mr. Heinig, the Sub-divisional officer.

My visit was more particularly to determine whether the proposals initiated by the Sanitary Commissioner and estimated for by the Superintending Engineer for the prevention of the water logging of the ground upon the town stands were necessary, and if so, feasible. This water logging has been attributed hitherto to the presence of the large tank in the immediate proximity of the town, and the pressure brought to bear upon it when the tank fills. The dates of inspection by the Sanitary Commissioner were April 1890, September 1893 and November 1894.

The first occasion was shortly after the crops had been harvested and irrigation had ceased, whilst the second two occasions were during the prevalence of the south-west monsoon and in the middle of the north-east monsoon. The moisture in the soil would therefore be due, in the first instance, to the surrounding lands having lately been irrigated, and, in the subsequent cases, to the local rainfall during the monsoons, and not to the presence of the tank above. The town of Anantapur is placed on a gentle slope trending from south to north, and to the west of the tank which occupies the main valley of that tract of country. It is therefore subject to a large amount of sub-soil flow due to the catchment area lying above it. The ground is a porous, gravelly and clayey soil covered with a layer of black cotton alluvium. During the monsoons this area becomes a huge sponge as it were, and, owing to the presence of the clay in the gravel and the layer of alluvium above, it is very retentive of the moisture it has absorbed.

In sending up the estimates for, first, cutting off a portion of the tank nearest the town by a new bund and thus removing its influence, if any, to a considerable distance away, and, secondly, digging a drainage channel between the tank as at present and the town, the Superintending Engineer furnished the levels of water in

the wells lying under the tank and habitually used by the townspeople. These levels were taken on the 19th March last, or near about the time of the year 1890, when the Sanitary Commissioner's first inspection was made.

The water-level in the tank was at that time 34.74 above datum, and its margin removed to a distance of fully a mile from the bund commanding the town. Since that date the tank had during May last received a large supply of water, the level of which at the time of my inspection was 41.24 or $6\frac{1}{2}$ higher than on the 19th March. I considered therefore, taking into account the fact that the water in the tank had had nearly six weeks to percolate through its bed, and affect the sub-soil water level in the town, that the results of this influence, if any, would have shown itself in

Wells indicated on plan	Level of water in well F.T.L. being 50.00.		Remarks. Weir crest + 50.0.
	On 19th March 1896.	On 14th July 1896.	
W ¹	29.70	25.02	Quite dry on 14th July 1896 though tank water higher.
W ²	32.32	26.30	
W ³	29.69	22.03	Close to or by side of W ³ .
W ⁴	..	25.10	
W ⁵	30.35	21.61	In main bazaar. This well is never dry.
W ⁶	23.38	21.37	
W ⁷	25.64	21.63	W.L. in surplus channel (above bridge). Well in Collector's cutcherry compound. Well in travellers' bungalow.
W(c)	..	23.15	
W(b)	..	30.95	Water-level in tank. At head of drain in town. Water-level in well.
W(a)	..	30.55	
W	34.74	41.24	
W	..	21.05	
W	..	21.63	

raising the levels of water in the same wells which had previously come under observation. I accordingly had these taken and find from the statement furnished me, as per margin, by the Executive Engineer that so far from the increased head of $6\frac{1}{2}$ feet of water in the tank raising the levels of water in the several wells, these were in every

instance considerably lower than when observed in March last.

I consider therefore that the idea that the presence of the tank is inimical to the health of the town may be dismissed as purely chimerical. The bed of the tank, moreover, is deeply silted, and this silt tends very materially to act as a layer of puddle clay when wet, and obstruct, rather than favour, percolation from the tank or infiltration into the sub-soil. To show how retentive the soil in the neighbourhood is I would direct attention to the levels of the water in the well in the travellers' compound and in the weir channel adjacent. Here whilst the water-level in the channel was 23.15, that in the well stood at 30.55.

I consider therefore that neither of the proposals provided for in the estimates submitted by the Superintending Engineer, III Circle, would, if carried out, affect the question of the sanitary condition of Anantapur in the slightest degree. Some good might be done by removing a row or two of the houses adjoining the tank bund, and planting up the area with the *Eucalyptus*, which it is well known is a great sub-soil water absorbent, and which has been planted with success in similar situations at Aska in the Ganjam district, which though it enjoys a cool winter, yet is subject to great heat and draught during the summer months as the Anantapur district.

OOTACAMUND,
23rd July 1896.

(Signed)

R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

No. 65 E.W.

Forwarded to the Chief Engineer, General, Roads and Buildings Branch, with reference to G.O., No. 1614 W., dated 28th May 1896.

OOTACAMUND,
28th July 1896.

(Signed) F. J. WILSON,
for Chief Engineer for Irrigation.

ORDER—No. 2271 W., dated 7th August 1896.

Communicated to the Local and Municipal Department with an expression of concurrence in the Public Works Department with the conclusions arrived at by the Chief Engineer for Irrigation.

(True Extract.)

Shen
Under Secretary to Government.

To the Chief Engineer for Irrigation.
" Superintending Engineer, III Circle.
" Local and Municipal Department, with enclosures.

I consider therefore that neither of the proposals provided for in the estimates submitted by the Superintending Engineer, III Circle, would, if carried out, affect the question of the sanitary condition of Anantapur in the slightest degree. Some good might be done by removing a row or two of the houses adjoining the tank bund, and planting up the area with the *Eucalyptus*, which it is well known is a great sub-soil water absorbent, and which has been planted with success in similar situations at Aska in the Ganjam district, which though it enjoys a cool winter, yet is subject to great heat and draught during the summer months as the Anantapur district.

OOTACAMUND,
23rd July 1896.
(Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

Exd. C. M. Thumbarwamy,
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated August, 7th.

Recd. 20 AUG. 96

Encl.

G.O. No. 2271 W., 7th Aug. 1896.

AUGUST.

Anantapur Tank

Note by the Chief Engineer for Irrigation on the supposed sub-soil flow from — and the improvement of the sanitary condition of that town, communicated to the Local and Municipal Department with an expression of concurrence in the conclusions arrived at by that officer.

When given for copying —
When copied — 189. 1
When examined — 5/9/96
When signed — 5/9

READ AGAIN G.O., No.
189 ,

DATED

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT

A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

N.B.—

A = Copy in full.
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