

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper :—

No. 91 T.C.

Report to accompany estimate for preliminary investigation of the Ponneri Project.

In his letter No. V./7 T.C., dated 3rd June 1879, the Deputy Chief Engineer for Irrigation asked for a report on the proposal to restore the Ponneri reservoir and lead a channel to it from the upper anicut. Major Vibart added that the investigation of this project would not interfere with the much more modest project for restoring the tank so as to catch the local drainage of 80 to 100 square miles. There have been several reminders from the Chief Engineer, but nothing has been done beyond examining and taking levels of the tank, the general feeling of local officers being that the project was entirely visionary.

2. In the first place it is to be noted that the ideas of the officers who first mooted the project in regard to the supply in the Cauvery were either extremely erroneous or the ordinary supply in the river has greatly decreased. It would be altogether impossible now to take from the river a drop of water that is not in the strictest sense surplus. The records of the upper anicut for 1846 have been examined and it is found that the average number of days on which water has exceeded 7 feet level at the Cauvery dam is 32. Tanjore can often utilize the whole of a 7 feet Cauvery fresh after drought, but with this depth there is very much more passing over the upper anicut than can be drawn off at the lower anicut and elsewhere. For present purposes it may be assumed that there is a large quantity of water available whenever the freshes exceed 7 feet and that the average number of days in which this occurs is 32, but the number varies much in different years. It was 8 days in 1867 and 74 in 1882.

3. The objections to taking a channel from the upper anicut are many and serious—

(1) it could not be done without altering existing works and introducing complicated regulators ;

(2) the channel would have to be taken from the Iyar above the Peruvalai sluice and as the Peruvalai channel has a very slight fall, much slighter than would be required for a flood water channel, the latter would pass for a long distance either through valuable nunjei or have to be taken in deep cutting to get round it ;

(3) the channel would be nearly 70 miles long and cross the whole drainage of the country in that distance. The cross drainage works would be very expensive, and it would also have to be considered that the channel would have to be large since it would run for only 32 days a year and every unnecessary mile probably would entail an expense of Rs. 15,000.

4. Owing to the width of the irrigated tract north of the Coleroon, there is no favourable site for the head of a channel between the upper anicut and about the 33rd mile (west of Tirumalaivadi), but there seems good reason to hope that if a channel is taken off about this place it will command land higher than the Ponneri reservoir. It is to verify this expectation and to ascertain where reservoirs can be made with advantage that it is proposed now to employ a surveyor for a couple of months. It is evident that no project can be remunerative unless it is on a large scale. Since

the regulator across the Coleroon and the cross drainage works will cost the same whether the channel is large or small and land compensation, which will be another very heavy item, will be proportionately less for a large channel, it is anticipated that it can certainly not pay to make a channel of less capacity than 1,000 cubic feet per second which will give a discharge of 2,765 millions cubic feet and for this storage capacity of probably 2,000 millions would have to be provided. Whether the country is favourable for the construction of the large reservoirs required for this and what area of irrigable land will be commanded have yet to be ascertained.

5. There are wild legends about the former condition of the Ponneri reservoir and the irrigation under it, but the opinion has been expressed by competent officers that the reservoir was never completed and brought into use at all. It seems to me altogether probable that it was intended to supply it by the Ponneri channel and that it was discovered too late that the levels did not permit this being done. If the channel is cut from the Coleroon, the tank can be completed and made use of either as a principal or a subsidiary reservoir, and if the channel is not excavated it will still pay to complete the tank though not to the size originally contemplated. The free catchment is under 20 square miles, but even all the water from this is not available as streams passing through the tank feed tanks irrigating 250 acres. It is calculated that about 800 acres at the most can be irrigated at a cost of about Rs. 30,000.

TRICHINOPOLY,
16th April 1895.

(Signed) W. HUGHES,
Suptg. Engineer, VI Circle.

To the Chief Engineer for Irrigation for sanction with reference
to his No. 12 V.I., dated 21st September 1894.

No. 29 E.W.

Forwarded to the Chief Engineer, Public Works Department, for sanction of
Government to the establishment applied for.

CHEPÂK,
23rd April 1895.

(Signed) T. W. S. SMYTH,
for Chief Engineer for Irrigation.

ORDER—dated 4th May 1895, No. 1046 W., Public Works.

Sanction is accorded to the entertainment, for a period of two months, of a surveyor on Rs. 100 and six lascars on Rs. 6 each per mensem in connection with the investigation of the Ponneri project in the Trichinopoly division.

2. This sanction has been registered as Provincial No. 10 W. of 1895-96 and classified as Establishment, Temporary.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.

„ Superintending Engineer, VI Circle, with one enclosure.
„ Examiner, Public Works Accounts.

Exd. C. A. Munisawmy
Spare Copies

GE-ERAL.
ESTABLISHMENT.

Govt. of {1895} Madras.
PUBLIC WORKS.

Dated May, 4th.

Recd.

Encl.

G.O., 4th May 1895, No. 1046 W.

MAY.

Establishment

Sanction accorded to the entertainment, for a period of two months, of a surveyor on Rs. 100 and six lascars on Rs. 6 each per mensem in connection with the investigation of the Ponneri project, Trichinopoly division.

Letter from the Executive Engineer,
Trichinopoly Division, No. 203 B dated
5th July 1895, to the Superintending Engineer
6th Circle:—

In submitting herewith an estimate for the further retention of the Survey Establishment sanctioned for the Ponneri Reservoir project, I have the honor to point out that the levels ordered to be taken by you are not even half finished and the existing estimate provides for the retention of the existing establishment only upto the 3rd instant. I think it a pity now that the investigation is in full swing not to thoroughly thrash it out and I request you will see fit to accord your sanction to the estimate.

No. 542 TC. dated 8 July 1895

Enclosure
1 Revised Estimate

Copy, together with the revised estimate, is submitted to the Chief Engineer for Irrigation, for sanction of Government

2. The Survey Establishment sanctioned
in G.O. No. 1046 W dated 4th May 1895, for
a period of two months is found inadequate
as my first ideas as to the line of channel here
have proved impracticable and other lines
have to be tried.

W. Hughes.
Supg Engineer Belmle

Superior's office, Belmle }
Dated 8 July 1895 }

W

CHIEF ENGINEER
FOR IRRIGATION.
10 JUL 95
NO. 627C

P. W. CURRENT No. 5572

No. 52 Encl 2
Recd: 17.7.95

From
The Suptg. Engineer
To
The Chief Engineer
for Design

Forwarded to the
Chief Engineer P.W.D.
with the request that
the sanction of Govt.
applied for, be obtained.

No. 542 T.C.

Dated 8 July 1895

Enclosures: - 1.

No. 1046 Wd 4-5-95

Whispered
For Chief Engineer for
Design.

Obtained
13 July 1895

Ponnery Project —
Submitting for sanction
of Govt. a revised estimate
of Rs 700 for temporary
Establishment required
for the investigation
of the —

O.L.S. 233
R 22/7.

PUBLIC WORKS DEPARTMENT.

No. 1869 Wd 26 July 1895

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

From the Suptg. Engineer, VI Circle, No. 542 T.C. d 8 July 1895
Endorsement thereon by the Chief Engineer for Design No. 528 Wd 13 July 1895

In the circumstances
stated, the sanction accorded
in G.O. No. 1046 Wd dated 4 May
1895 to the survey establish-
ment for the investigation of
the Ponnery project in the
Trichinopoly Division, is
extended for a further
period of two months.

2. This sanction has been
registered as Provincial No. 36 W
of 1895-96, and classified as
Establishment, Temporary.

DESPATCHED
26 JUL 95

To
The Chief Engr. for Design.
Suptg. Engr. VI Circle
with 2 encls.
Examined. P.W. accts.

Cr
20/95

✓
Inventor. for
Pomeri. power

No 1869 W 26 July 1895

B. C. M.

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No. 1869