M.R.O. 1—99,000—16-10-22.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No.	3060	**Press** ~~**Mis.**~~	
101-102 **Dated**	8-12-	**19**	1868

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
8th December 1868.

No. 101. Read the following Proceedings of the Madras Government in the Public Works Department:—

Sanctioning estimates, amounting to Rupees 6,320, for the restoration of the Mel-Cooppum high level Reservoir in the North Arcot District. } (Here enter 2nd December 1863, No. 3,759.)

No. 102. ORDER THEREON, 8th December 1868, No. 3,060.

Irrigation, No. 5. Communicated to the Revenue Board.

(True Extract.)

(Signed) F. BRANDT,
Under Secretary to Government.

To the Board of Revenue, with Proceedings, Public Works Department, No. 3,759.

Exd. G. A. Turton.

Govt. of Madras.

REVENUE.

To

THE BOARD OF REVENUE.

Dated December, 8th.

Recd.

Encl.

G. O., 8th December 1868, No. 3,000.

DECEMBER

Nos. 101-102.

Mel-Cooppum Reservoir in North Arcot.

—Order sanctioning estimate for its restoration, communicated to Revenue Board.

Proceedings of the Madras Government, Public Works Department, 2nd December 1868.

No. 44. Read the following Endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 12th November 1868, No. 92 :—

Read the following letter from the Superintending Engineer, 4th Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Madras, 2nd November 1868, No. 3,777.

1 Survey.
1 Plan.
2 Estimates.
1 Report.
1 Ayacut Statement.
1 Letter, No. 367, dated 2nd October 1868.

1. Adverting to your Memorandum No. 68, dated 17th September 1868, I have the honor of submitting revised plans and estimates, amounting in the aggregate to Rupees 6,300, for restoring the Mel-Cooppum high level reservoir in the Arcot Talook, Vellore Range, North Arcot District, together with an explanatory letter from Lieutenant Brockman.

2. The profits of the work will now be reduced to 12¾ per cent.

3. I concur in the remarks of the Assistant Engineer, and recommend the amended project for favorable consideration and sanction from the funds provided for it in the Budget,* which could be supplemented to make up the amount of the estimate, if found necessary, later in the year from savings.

* Item No. 178.

From the Superintending Engineer, 4th Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Camp at Poloor, 1st August 1868, No. 2,217.

1. In the current year's Imperial Budget, *vide* item No. 178, a sum of Rupees 4,800 is provided for the restoration of the Mel-Cooppum high level reservoir in the Vellore Range, North Arcot District, I have now the honor of enclosing, for the purpose of being laid before Government for sanction, the documents marginally noted connected with that project.

2 Estimates.
1 Survey.
1 Plan.
1 Report.
1 Ayacut Statement.

2. The situation of the tank and other particulars are fully entered into in the report which accompanies, drawn up by Lieutenant Brockman. It will be observed that the tank is now in ruins, and of course yields no revenue. Its capacity is approximately estimated at 600,000 cubic yards, and as the supply is stated to be perennial, it is expected that there will be sufficient water for the irrigation of the land colored green in the survey, which measures about 380 acres, as also for the land under the Keel-Cooppum tank.

3. The works to be executed are filling breaches, raising portions of bund, building revetment, blasting rock to form a calingula, and constructing an aqueduct.

4. The revenue likely to accrue after the execution of these works is Rupees 804 (*vide* ayacut statement), which is a little more than 16 per cent. on the outlay viz., Rupees 5,000, contemplated in the estimates.

5. The Collector of the District approves of the project.

6. The funds required in addition to the Budget provision can be given from savings later in the year, if found to be required.

Report to accompany Plans and Estimates for the re-construction of the Mel-Cooppum high level Reservoir in the Arcot Talook of the Vellore Range of the North Arcot District.

1. This tank is formed by a bund of about 400 feet in mean length, constructed at the gorge of a valley running east and west, of a little over two miles in length. The extreme width of the valley is at about two-thirds of its length from its head. Its drainage or catchment basin is about four square miles in area. but the actual water-spread of the tank at high level is of small extent considering the depth of water retained at the bund, viz., forty-five feet from bottom of hill channel to high water level. The cubical contents of the tank may be taken roughly at 600,000 cubic yards, but this must be looked upon only as an approximate statement of its capacity, as the interior is much cut up by channels and encroached upon by spurs of the enclosing hills, thereby rendering a true measurement of its contents almost impossible.

2. The spring water that flows down the channel of the Mel-Cooppum valley is very abundant, and stated by the villagers to be perennial. This leads me to conclude that the construction of the bund will retain such an amount in the soil above as to keep the tank always partially filled, and the more effectually to obtain this a masonry wall, with a foundation depth of six feet and superstructure of twenty-four feet in height, has been provided in the estimate. This, it is presumed, will check any percolation through the bed of the channel or bund when the tank is full.

3. The sluice of this tank is in good order, having been just constructed at the period when the tank breached. A high level sluice on the south side will be formed in the calingula for the purpose of irrigating the high lands on the south of the channel. The calingula is to be formed out of the solid rock, by blasting away the portion now existing above the high level contour of the tank.

4. In addition to the probable irrigable area shown on the plan, and colored green, and which represents the land of Mel-Cooppum village that will be benefited by the construction of the tank, the land under the Keel-Cooppum tank itself, it is strongly presumed, will be benefited by the spring water and the water from the fields above that tank. The Keel-Cooppum villagers indeed are willing to for go the use of their tank, and propose cultivating its bed by the water from the Mel-Cooppum fields, and carrying off the surplus water by their tank sluice to irrigate the lands below. This would be certainly a feasible, and at the same time a profitable, idea.

VELLORE,
22*nd April* 1868.

(Signed) R. R. E. BROCKMAN, Lieutenant, R. E.,
Assistant. Engineer, Vellore Range.

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1. The estimates now submitted provide for the restoration of a tank situated on one of the small feeders of the river Cheyaur, in the south-west corner of the North Arcot District.

2. The tank has a catchment basin of only four square miles, and to retain the limited supply which is likely to be derived from so small an area, the embankment will have to be raised to the height of fifty feet, or about fifteen feet higher than the old native bund.

3. The storage capacity is estimated at 600,000 cubic yards, and the additional revenue at 804 Rupees, or about 12¾ per cent. on the estimated cost, Rupees 6,320.

4. The original design provided for rough stone revetment with a slope of about three horizontal to four vertical; and allowed for only six feet between high water level and the top of the embankment. I requested the Superintending

Engineer's re-consideration of these and other points of less importance; and the estimates have been returned with the slope altered to 1¼ to 1, and with the water surface lowered three feet.

5. The project has been carefully drawn up by the Range Officer, Lieutenant Brockman, R. E.; and believing that it will answer his expectations, I would beg to recommend it for sanction.

6. The estimated amount is made up of the following items:—

	Rs.
Earthwork and rough stone...	3,920
Masonry	880
Blasting for escape	900
Small aqueduct	620
Total ..	6,320

(Signed) J. C. ANDERSON, Colonel, R. E.,
Chief Engineer for Irrigation.

No. 45. ORDER THEREON, 2nd December 1868, No. 3,759.

IRRIGATION, No. 2.

1. With these papers the Chief Engineer for Irrigation submits, with his recommendation, estimates amounting to Rupees 6,320 for the restoration of the Mel-Cooppum high level Reservoir in the North Arcot District.

2. It appears that by the execution of the proposed works an annual revenue of 804 Rupees will be realised, representing a return of nearly thirteen per cent. on the estimated outlay.

3. The Collector approves of the project, and as it is likely to be remunerative, the Government sanction the estimate of Rupees 6,320, and authorise the work to be proceeded with from the sum of Rupees 4,800 provided for it in the Budget of the current official year.

Item 178.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 4th Division.
,, Accountant General.
,, Controller of Public Works Accounts.
,, Chief Engineer for Irrigation.
,, Revenue Department.

Exd. S. T. Augustin.

P. 3060.
Coming to the Revenue Board

Revenue Dept.
No. 3752.

Govt. of [1868] Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,

6TH DIVISION

&c., &c., &c.

Dated December, 2nd.

Recd. 4th —— *Encl.*

G. O., 2nd December 1868, *No.* 3,759.

DECEMBER.

Nos. 44-45

Mel-Cooppum high level Reservoir.—Estimates, amounting to Rupees 6,320, for the restoration of the Mel-Cooppum high level reservoir in the North Arcot District, sanctioned.

No 3060, 8th Dec.