

(1) Number of pages 11(2) Date of repair 27

(3) Initials of the Referencer \_\_\_\_\_

# MADRAS RECORD OFFICE.

Government of Madras.

*Public works* DEPARTMENT.

|          |       |                 |
|----------|-------|-----------------|
| G.O. No. | 2799  | Press           |
|          |       | <del>Mis.</del> |
| 389-370  |       |                 |
| Dated    | 21-11 | 1870.           |

Not to be folded or roughly handled

*B.*

*Proceedings of the Madras Government, Public Works Department,  
21st November 1870.*

Read the following letters :—

No. 389. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Sooramungalum, 26th August 1870, No. 103.

I HAVE the honour to forward, for the sanction of Government, a revised estimate of Rupees 2,045, in the form of a comparative statement, for restoring the Pareacoorchy ruined tank in the Virdachellum Talook, South Arcot District.

1 Plan.  
1 Abstract Estimate.  
1 Comparative Statement.

2. An estimate of Rupees 1,390 was sanctioned for this service in G. O. No. 1,428, dated 1st May 1869. The necessity for the supplemental estimate has arisen in consequence of its having been ascertained that the calingulah provided

in the original estimate is insufficient in length\* to admit of the discharge of the surplus water flowing down the jungle stream which feeds the tank, and, passing on, supplies other tanks lower down.

\* 21 feet clear water-way.

3. After the work was put in hand during the last official year, it was ascertained by actual experiment during the late heavy monsoon that the jungle stream above referred to discharges about 967 cubic feet per second; and to discharge this quantity of water at a depth of 2 feet a weir of nearly 100 feet in length is necessary, instead of one of 12 yards as originally proposed.

4. The difference between the original and revised estimates shows an increase in the cost of the whole work of Rupees 655, and I request that Government will be pleased to sanction that amount for the completion of the work from the Reserve for 1870-71 under "Agricultural."

5. As the revenue in the first year will be Rupees 1,600, it is apparent that the percentage of return on the outlay will still be very remunerative.

No. 390. From the same officer, dated Cuddalore, 24th October 1870, No. 161.

In reference to Memorandum No. 189, dated 5th September 1870, from the Acting Chief Engineer for Irrigation, remarking on the revised estimate for the Pareacoorchy tank in the South Arcot District submitted to you for sanction with my letter No. 103, of the 26th August, I have the honour to report as follows.

1 Plan.  
1 Abstract Estimate.  
1 Comparative Statement.  
1 Revenue Statement.

2. As this work is three-fourths completed it did not occur to me, in submitting a revised estimate for what is still required, and taking into consideration the very trifling amount in question, that I should be expected to go into the entire question, and that the variety of information now called for would be expected.

3. The original estimate for this tank, Rupees 1,000 in amount, was prepared 16 years ago and sanctioned in 1857, but not carried out for want of funds. In submitting (for sanction) a revised estimate, amounting to Rupees 1,390, for the work with his letter No. 14, dated 16th April 1869, Colonel Foord, R.E., men-

tioned that the increase in the revised estimate was owing to his having raised the rates, as he considered it advisable to do so, in consequence of so long a time having elapsed since the estimate was prepared.

4. Considering that at the time the original estimate was prepared the authorized limit for the construction of a public bungalow was Rupees 2,000, and that a building of the same kind cannot now be erected under double that sum, I must say that I can see no legitimate cause for the surprise evinced by Major Mullins at the increase in the estimate on that account.

5. The increase in the quantity of earthwork is due to the alteration of the site originally proposed for the calingulah. Colonel Foord, R.E., at first intended that the calingulah should be built in the stream which supplies the tank, but when he last inspected the work he considered that it would be safer to build it on the high ground where the bund terminates at its western end. It was therefore decided that the bund should be carried across the stream, and its innerslope properly rivetted with laterite. Hence the increase in these two items of earthwork and laterite.

6. The raising of the wing walls, as proposed by Major Mullins, is decidedly advantageous, and will cost Rupees 35, making the total of the revised estimate amount to Rupees 2,080 and Rupees 690 as that now requiring sanction. The design of the calingulah has been altered, owing to the change in its position, as mentioned above, and to its insufficient width, as explained in my letter already quoted.

7. With regard to the revenue anticipated, Colonel Foord's letter is not very accurately quoted by Major Mullins. In that letter Rupees 658 are *not* mentioned as the expected increase of revenue, but Colonel Foord is very particular in stating that that was the increase of revenue *expected when the estimate was made*, and assessments have altered very considerably since that period.

8. I forward herewith a statement received from the Tahsildar of Virdachellum showing the increased revenue expected from the restoration of this tank. It will be seen that it amounts to Rupees 2,035. But, as stated in my letter above quoted, it is not anticipated that more than Rupees 1,600 of this amount will be the revenue during the first year.

9. With regard to the capabilities of the tank, it seems rather late in the day to be discussing this question, now that three-fourths of the work is finished, and that the outlay already incurred will be altogether wasted if the work is not carried out to completion.

10. It will be seen, however, from the accompanying statement that the extent of land commanded by the tank is about 400 cawnies. The tank is capable of storing 604,267 cubic yards of water, or sufficient for nearly 21 days for the said extent of land at 3 cubic yards per hour per cawny; and to supply the full quantity required for the season of 4 months, the tank must be filled six times in the season.

11. The Executive Engineer of the Range who watched last year the stream that supplies the tank, and who is well acquainted with its nature, states that there is no doubt that the tank will be filled even as often as twelve times in the season;

and that in this year, although the monsoon has not yet set in, the stream has had three supplies down it, and it is likely to have a great deal more during the approaching north-east monsoon. The tank will take about five hours to fill with a full stream.

12. There is no question, therefore, as to the remunerative character of the project, nor as to the tanks getting, in ordinary seasons, a sufficient supply of water.

No. 331.

ORDER THEREON, 21st November 1870, No. 2,799.

IRRIGATION, No. 30.

In August last the Acting Superintending Engineer of the 5th Division transmitted for sanction a revised estimate, amounting to Rupees 2,045, for the restoration of the Pareacoorchy ruined tank in the Virdachellum Talook of South Arcot, the sanctioned estimate at the time being Rupees 1,390. He explained that a part of the increase, shown by the comparative statement to be Rupees 321-11 6, was due to its having been found necessary to lengthen the surplus weir; the remainder of the excess was shown by the comparative statement to be caused by—

1stly,—An increase of earthwork from cubic yards 6,742 to 9,067.

2ndly,—A new item, 40 cubic yards of loose laterite stone work.

3rdly,—A small sum for sundries.

Captain Roberts' letter was entirely silent as to the reason for the great difference in the quantity of earthwork, and as to the necessity for the stone work.

2. In transmitting the revised estimate, the Acting Superintending Engineer mentioned that the work would still be very remunerative, as the revenue in the first year would be Rupees 1,600.

3. The Acting Chief Engineer, after examining the papers accompanying the revised estimate, pointed out that no explanation of the cause of more than half the excess had been given; and, with reference to the expected revenue, he noticed that the ayacut assessment of the lands under the tank, as entered at the head of the abstract revised estimate was Rupees 162-5-3, and the highest year's revenue Rupees 191; while, in the Superintending Engineer's letter, printed in G. O., 1st

May 1869, No. 1,428, Rupees 658 were mentioned as the expected\* increase of revenue. The Chief Engineer moreover remarked that if the larger revenue (1,600 Rupees) reported to be anticipated were due to an estimated increase of the acreage, it would be necessary to show that the tank could hold a sufficient supply of water.

4. To the very proper and necessary remarks of the Chief Engineer upon the revised estimate as submitted by Captain Roberts, the latter Officer takes exception in his letter of the 24th October. The Government regret that the Superintending Engineer should have adopted this course, because otherwise, on the receipt of the additional information, the estimate would have been disposed of without any special notice being taken of the way in which it had been submitted.

*Proceedings of the Madras Government, Public Works Department,  
21st November 1870.*

for sanction. Now, however, the Government must remark that Captain Roberts afforded very insufficient explanations, and that important alterations in a work sanctioned by the Government and therefore inadmissible without their previous concurrence, appear to have been introduced. Captain Roberts moreover speaks of the excess as a trifling amount, but it was no less than 47 per cent. on the sanctioned estimate, and such an increase demanded full and clear explanation.

5. The way in which the Superintending Engineer has dealt with the revenue aspect of the project likewise calls for notice. The capabilities of the tank came under discussion because Captain Roberts, without adducing any evidence, put the increase of revenue expected at Rupees 1,600, instead of Rupees 658. He was asked to explain how this great difference was to be accounted for, and his reply shows how necessary it was that the statement he had made should not have been accepted in the absence of particulars showing upon what data it had been based. Captain Roberts appears to consider that a tank holding, when full, 6,04,267 cubic yards, and therefore capable of irrigating, according to the usual allowance, about 100 acres of land, is likely to fill so frequently as to be able to irrigate about 400 cawnies or 529 acres. Before this opinion can be accepted, it will be necessary for the Superintending Engineer to show that other tanks similarly circumstanced irrigate, in proportion to their capacity, an acreage at all corresponding. In the meantime the Government think that the former estimate, Rupees 658, of the revenue to be derived is far more likely to prove correct.

6. The revised estimate, Rupees 2,080, which includes an addition of Rupees 35 for increasing the height of the wing walls of the waste weir, is sanctioned, and the sum, Rupees 690, required to complete the work should be appropriated from the grant\* for Minor New Works Agricultural, there being no funds available from the Reserve.

\* This can be supplemented if necessary.

(True Extract.)

Major, R.E.,

Joint-Secretary to Government.

To the Acting Superintending Engineer, 5th Division.

.. Controller of Public Works Accounts.

.. Revenue Department.

.. Chief Engineer for Irrigation.

Exd. E. C. Shunker.

N<sup>o</sup> 103. Superintg. Engr's Office, 5<sup>th</sup> Division,  
Soramangalam, 26<sup>th</sup> August 1870.

20

From, The Adj. Superintending Engineer,  
5<sup>th</sup> Division

To, The Secretary to Government,  
Public Works Department

Sir,

I have the honor to forward,  
Enclosures 3. for the sanction of Government, a Revised  
1 Plan estimate of Rupees 2,045 in the form of a  
1 Abstract & Comparative Statement, for restoring the  
1 Comparative Statement. Pareacorchy ruined tank in the Vinda-  
chellum Taluk, South Arcot District.

2. An estimate of Rupees 1,390 was sanctioned for this service in G.O. N<sup>o</sup> 1428, dated 1<sup>st</sup> May 1869. The necessity for the Supplemental estimate has arisen in consequence of its having been ascertained that the balingulah provided in the Original estimate is insufficient in length to admit of the discharge of the surplus water flowing down the jungle stream which feeds the tank, and, passing on, supplies other tanks lower down.

2 1/2 feet clear  
water way.

3. After the work was put in hand, during the last official year, it was ascertained by actual experiment during the late heavy Monsoon, that the jungle stream, above referred to, discharges about 967 cubic feet per second; and to discharge this quantity of water at a depth of 2 feet, a weir of nearly one hundred feet in length is necessary, instead of one of 12 yards as originally proposed.

4. The difference between the original and revised estimates shows an increase in the cost of the whole work of Rs 655, and I request that Government will be pleased to sanction that amount for the completion of the work from the Reserve for 1890-91, under "Agricultural."

5. As the Revenue in the first year will be Rs 1,600, it is apparent, that the percentage of return on the outlay will still be very remunerative.

I have the honor to be,  
Sir,

Your most obedient Servant.  
Lieut. Robert, Captain R.E.,  
Adj. Superintg. Engineer.

To the Supy. Genl. 5<sup>th</sup> Div.  
1-189 of 5<sup>th</sup> Sept/70

Md 870 Sept 29  
From, No. 3384  
The Supt. Engineer,  
5<sup>th</sup> Division  
To, The Secty. of Agricul.  
P. W. Depart.

Dated 29<sup>th</sup> August 1890.  
Recd. 29<sup>th</sup> Sept 1890.

Enclosed three  
Periaconchy ruined  
tank. - Forwarding  
for the sanction of Govt.,  
a revised estimate of Rs.  
2045. for restoring the  
ruined tank in the  
Vindachellum Talook,  
South Arcot District  
No 2799-21<sup>st</sup> November/70

62 389  
to be sent to  
Supt. to Govt. 30th Oct/70

5<sup>th</sup> Division, P. W.

New Works.

Agricultural.

South Arcot District.

No. 4 Range.

Vindachellum Talook.

Abstract of Revised Estimate of 1890-91.  
Work - Restoring the Periaconchy Ruined Tank.

Ayacut bawries. 29-13-5 Rupees. 162-5-3.

Five years average. 23-6-120-8.

Highest of 5 years. 35-3-2 191-8.

Remarks. - During the progress of the work it was found that the balingulah of 12 yards provided in the Original Estimate is too small and that a larger one of 100 feet was necessary to make the Tank safe.

| Quantity or Number | Description of work                  | Rate | Per     | Amount  | Total    |
|--------------------|--------------------------------------|------|---------|---------|----------|
|                    | <u>Tank.</u>                         |      |         |         |          |
| 9064               | Cubic yards of Earth work            | "    | 1 3 byd | 708 5 9 |          |
| 40                 | Do. of Laterite stone work           | 3 8  | Do.     | 140 . . |          |
|                    | Sundries                             |      |         | 11 10 3 |          |
|                    |                                      |      |         |         | 860 . .  |
|                    | <u>Shice of 16 yards Tunnel.</u>     |      |         |         |          |
| 55 3/4             | Cubic yards of Brick in chunam       | 3 6  | byd     | 188 2 6 |          |
| 3                  | Stones                               | 1 8  | Each    | 4 8 .   |          |
|                    | Excavating foundation and Sundries   |      |         | 12 5 6  |          |
|                    |                                      |      |         |         | 205 . .  |
|                    | <u>Balingulah of 100 feet long.</u>  |      |         |         |          |
| 7145               | Cubic feet of Brick in chunam inclu. |      |         |         |          |
|                    | ding plastering                      | 2    | byd     | 893 2 . |          |
|                    | Carried over                         |      |         | 893 2 . | 1065 . . |

|                          |  |  |  |                  |
|--------------------------|--|--|--|------------------|
| Brought over             |  |  |  | 893 2 . 1065 . . |
| Excavating foundation &c |  |  |  | 35 . .           |
| Sundries                 |  |  |  | 51 14 . .        |

980 . .

Total Amount of Estimate Rupees. 2045 . .

Deduct the amount of Estimate sanctioned in G. O. No. 1128 dated 1<sup>st</sup> May 1869. 1390 . .

Balance requiring sanction. 655 . .

Rupees six hundred and fifty five only.

1<sup>st</sup> 4 Range Office South Arcot  
Virdachellum, 9<sup>th</sup> July 1870.

Signed / R. C. Norfor  
Executive Engineer 1<sup>st</sup> Range  
South Arcot

Wm. J. Roberts Captain, R.E.  
Actg. Superintending Engineer 5<sup>th</sup> Range

W. S. Johnson at W. S. Johnson. etc.

10/15/18

question

5<sup>th</sup> Division D. of W. )

about 1000 District

4312

Mr 3384/30

Abstract of  
Revised Estimate for  
restoring the peacekeeping  
and armed forces in the  
about

Amount of Estimate of \$ 2045.

Agricultural.  
South Arcot District.

5<sup>th</sup> Division, D. P. W.

(A) New Works.  
Virudachellum Talook.

Comparative Statement shewing the difference between the Original and Revised Estimates for Restoring the Peracoorchy ruined Tank.

| Description of work.                | Units     | Original Estimate |      |       | Revised Estimate |          |      | Increase |          | Decrease |          | Balance                     | Remarks. |        |
|-------------------------------------|-----------|-------------------|------|-------|------------------|----------|------|----------|----------|----------|----------|-----------------------------|----------|--------|
|                                     |           | Quantity          | Rate | Per   | Amount           | Quantity | Rate | Per      | Amount   | Quantity | Amount   |                             |          |        |
| — Tank. —                           |           |                   |      |       |                  |          |      |          |          |          |          |                             |          |        |
| Earthwork.                          | Cub. yds. | 6742              | 13   | byd.  | 526 11 6         | 264      | 13   | byd.     | 708 5 9  | 2325     | 181 10 3 |                             |          |        |
| Loose Laterite Stone work.          | ditto     |                   |      |       |                  | 40       | 3 8  | do.      | 140 ..   | 40       | 140 ..   |                             |          |        |
| Sundries.                           |           |                   |      |       |                  |          |      |          | 11 10 3  |          | 11 10 3  |                             |          |        |
|                                     |           |                   |      |       |                  |          |      |          | 860 ..   |          | 333 4 6  |                             |          |        |
|                                     |           |                   |      |       | 526 11 6         |          |      |          |          |          |          |                             |          |        |
| — A sluice of 16 yards. —           |           |                   |      |       |                  |          |      |          |          |          |          |                             |          |        |
| Brick in chunam work.               | Cub. yds. | 55 3/4            | 3 6  | byd.  | 188 2 6          | 55 3/4   | 3 6  | byd.     | 188 2 6  |          |          |                             |          |        |
| Stones.                             | A 1/2     | 3                 | 1 8  | Each  | 4 8 ..           | 3        | 1 8  | Each     | 4 8 ..   |          |          |                             |          |        |
| Excavating foundation and Sundries. |           |                   |      |       | 12 5 6           |          |      |          | 12 5 6   |          |          |                             |          |        |
|                                     |           |                   |      |       | 205 ..           |          |      |          |          |          |          |                             |          |        |
|                                     |           |                   |      |       | 205 ..           |          |      |          |          |          |          |                             |          |        |
| — Calingulah of 12 yards long. —    |           |                   |      |       |                  |          |      |          |          |          |          |                             |          |        |
| Brick in chunam work.               | Cub. feet | 3820 1/2          | 2    | 6 1/2 | 477 9 ..         |          |      |          |          |          | 3820 1/2 | 477 9 ..                    |          |        |
| Stone in chunam.                    | Cub. yds. | 17 7/9            | 2    | ..    | 35 8 10          |          |      |          |          |          | 17 7/9   | 35 8 10                     |          |        |
| Loose Stone work.                   | ditto     | 39                | 1 8  | Do.   | 58 ..            |          |      |          |          |          | 39       | 58 ..                       |          |        |
| Whight Stones.                      | A 1/2     | 12                | 1 8  | Each  | 18 ..            |          |      |          |          |          | 12       | 18 ..                       |          |        |
| Excavating foundation.              |           |                   |      |       | 30 ..            |          |      |          |          |          |          | 30 ..                       |          |        |
| Sundries.                           |           |                   |      |       | 38 10 8          |          |      |          |          |          |          | 38 10 8                     |          |        |
|                                     |           |                   |      |       | 658 4 6          |          |      |          |          |          |          | 658 4 6                     |          |        |
|                                     |           |                   |      |       | 658 4 6          |          |      |          |          |          |          |                             |          |        |
| — Calingulah of 100 feet long. —    |           |                   |      |       |                  |          |      |          |          |          |          |                             |          |        |
| Brick in chunam.                    | Cub. feet |                   |      |       |                  | 845      | 2    | 6 1/2    | 893 2 .. | 7145     | 893 2 .. |                             |          |        |
| Excavating foundation &c.           |           |                   |      |       |                  |          |      |          | 35 ..    |          | 35 ..    |                             |          |        |
| Sundries.                           |           |                   |      |       |                  |          |      |          | 51 14 .. |          | 51 14 .. |                             |          |        |
|                                     |           |                   |      |       |                  |          |      |          | 980 ..   |          | 980 ..   |                             |          |        |
|                                     |           |                   |      |       |                  |          |      |          | 2045 ..  |          | 1313 4 6 | 658 4 6                     | 655 ..   |        |
| Total.                              |           |                   |      |       |                  |          |      |          |          |          |          |                             |          |        |
|                                     |           |                   |      |       | 1390             |          |      |          |          |          |          |                             |          |        |
|                                     |           |                   |      |       |                  |          |      |          |          |          |          | Balance requiring sanction. |          | 655 .. |

Net requirement, 2440 Cans 4-8.

\* Sanctioned in 13th Nov 2011 at 11.18

\* Sanctioned in G. O. N<sup>o</sup> 1428 dated 1<sup>st</sup> May 1870.

Balance requiring sanction. — 655 ..

N<sup>o</sup> 4 Range Office, South Arcot.  
Virudachellum, 9<sup>th</sup> July 1870.

Collector of South Arcot.

P. K. R. Captain, R. E.  
Superintending Engineer 5<sup>th</sup> D.

(Signed) P. C. Norford  
Executive Engineer  
N<sup>o</sup> 4 Range, S. Arcot.

question

4312

16. 1st Chamber.

5<sup>th</sup> Division D. 3. 17.

| Name of Village, Township & County | Exhausted | Present Tax | Our decrease |
|------------------------------------|-----------|-------------|--------------|
|                                    |           |             | 20.50        |

|                   |      |          |        |       |       |
|-------------------|------|----------|--------|-------|-------|
| Pineorchy         | Pine | 200      | 525    | 1,000 | 1,000 |
| Be wasteland      |      | 20       | 528    | 100   | 1528  |
| Kanyah            |      | 13 14 3  | 70 76  |       |       |
| Be wasteland      |      | 20       | 1228   |       | 1228  |
| Increased Revenue |      |          |        |       |       |
|                   |      | 253 14 3 |        |       | 1275  |
| Malepatty         | Pine | 50       | 250    | 250   |       |
| Maingatty         | Be   | 60       | 300    | 300   |       |
| Keel Patty        | Be   | 40       | 200    | 200   |       |
| Increased Revenue |      |          |        |       |       |
|                   |      | 403 14 3 | 595 76 |       | 750   |

Grand Total 2025

No 4 Range office, S.A.,  
Porto Novo, 10<sup>th</sup> October 1870

Signed / b. Appaswamy Sundar  
Chairman of Vidachellam  
/ True Translation /

Signed / P. E. Hoffman

See: Engineers, 607 Camp, s.d.

Rich. J. Roberts Capt. U.S.A.  
 My. Supy: Engr, 5<sup>th</sup> Regt

N<sup>o</sup> 161

Superintg Engr's office, 5<sup>th</sup> D<sup>n</sup>,  
Cuddalore, 24<sup>th</sup> October 1870.

From,

Captain R. A. Roberts R.E.,  
Actg Superintg Engineer, 5<sup>th</sup> D<sup>n</sup>.

To,

The Secretary to Government,  
P. W. Department,  
Madras.

Sir,

In reference to Memo N<sup>o</sup> 189,  
dated 5<sup>th</sup> September 1870, from the  
Acting Chief Engineer for Irrigation,  
reimarking on the Revised Estimate  
for the Peracoorchy tank in the  
South Arcot District, submitted to  
you for sanction with my letter N<sup>o</sup>  
103, of the 26<sup>th</sup> August, I have the  
honor to report as follows.

1. As this work is three fourths  
completed it did not occur to me,  
in submitting a revised Estimate  
for what is still required, and taking  
into consideration the very trifling  
amount in question, that I should  
be expected to go into the entire  
question

Enclosures 4.

- 1. Plan.
- 1. Abstract Estimate
- 1. Comparative statement.
- 1. Revenue statement.

For the revised  
estimate the  
amount is Rs 47  
per cent.

147/4312/10.

question, and that the variety of information now called for, would be expected.

2. The original Estimate for this tank Rupees 1000 in amount was prepared 16 years ago, and sanctioned in 1857, but not carried out for want of funds. In submitting for sanction a revised Estimate, amounting to Rupees 1370, for the work with his letter No. 14, dated 16<sup>th</sup> April 1869, Colonel Ford R.E. mentioned that the increase in the revised Estimate was owing to his having raised the rates as he considered it advisable to do so, in consequence of so long a time having elapsed since the Estimate was prepared.

3. Considering that at the time the original Estimate was prepared the authorized limit for the construction of a Public Bungalow was Rs 2000, and that a building of the same kind cannot now be erected under double that sum, I must say that I can see no legitimate cause for the

It is in the  
estimate which

This might  
be made to  
be more  
correct

the surprise evinced by Major Mullins at the increase in the Estimate on that account. (11)

4. The increase in the quantity of Earth work is due to the alteration of the site originally proposed for the Balingulah. Colonel Ford R.E. at first intended that the Balingulah should be built in the stream which supplies the tank, but when he last inspected the work he considered that it would be safer to build it on the high ground where the bund terminates at its western end. It was, therefore, decided that the bund should be carried across the stream, and its inner slope properly revetted with laterite. Hence the increase in these two items of earthwork and laterite.

5. The raising of the wing walls, as proposed by Major Mullins, is decidedly advantageous, and will cost Rupees 35, making the total of the revised Estimate amount to Rupees 2000, & Rupees 690, as that now requiring

requiring sanction. The design of the balingulak has been altered - owing to the change in its position, as mentioned above, and to its insufficient width, as explained in my letter already quoted.

6. With regard to the revenue anticipated, Colonel Ford's letter is not very accurately quoted by Major Mullins. In that letter Rupees 650 are not mentioned as the expected increase of revenue, but Colonel Ford is very particular in stating that that was the increase of revenue expected when the Estimate was made. And assessments have altered very considerably since that period.

7. I forward herewith a statement received from the Tahildar of Viradachellum showing the increased Revenue expected from the restoration of this tank. It will be seen that it amounts to Rupees 2025. But, as stated in my letter above quoted, it is not anticipated that more than

than Rupees 1600 of this amount will be the revenue during the first year.

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10. The Executive Engineer of the Range, who watched last year the stream that supplies the tank, &c. who is well acquainted with it,

nature, states that there is no doubt that the tank will be filled even as often as twelve times in the season; and that in this year, although the monsoon has not yet set in, the stream has had 3 supplies down it, and it is likely to have a great deal more during the approaching North East monsoon. The tank will take about 5 hours to fill with a full stream.

" There is no question, therefore, as to the remunerative character of the project, nor as to the tank's getting, in ordinary seasons, a sufficient supply of water.

I have the honor to be  
Sir,  
Your most Obedt Servt.

Rich<sup>d</sup> J. Roberts Captain R.E.  
Ag<sup>y</sup> Superintg Engineer, B<sup>nd</sup> W<sup>ater</sup>.

nature, states that there is no  
at all to be done.

From the <sup>1st</sup> Asst. Engineer  
No 4312  
The Superintending Engineer  
5th Division

To  
The Secretary to Govt.  
P.W. Department  
Madras

Dated 24<sup>th</sup> } October 1870  
Recd 28<sup>th</sup> }  
Sd/- No 161.

Encls 4  
Percacorchi ruined tank  
Resubmitting for sanc-  
tion, and with certain  
observations the revised  
estimate of Rs 2080 for  
restoring the Percacorchi  
ruined tank in the  
Virdachellum Taluq  
of South Arcot  
No 2799-21 per 170

No 370  
C. S. 10/10/70 D.S.

Public Works Department

No 2799

Proceedings of the Madras Government  
Under date the 21<sup>st</sup> Nov 70

Read the following

From The Asst Engineer, 5<sup>th</sup> Div. H.E. No 103 of 27<sup>th</sup> August 1870/  
From The Asst Engineer 5<sup>th</sup> Div. H.E. No 161 of 24<sup>th</sup> October 1870/

In August last the  
Acting Asst Engineer, 5<sup>th</sup>  
Division transmitted for  
sanction a revised estimate  
amounting to Rs 2045 for  
the restoration of the Percacorchi  
ruined tank in  
the Virdachellum Taluq  
of South Arcot; the sanc-  
tioned estimate at the  
time being Rs 1390. He  
explained that a part of  
the increase shown by the  
comparative statement to  
the Rs 321-11-6 was due to  
its having been found  
necessary

necessary to lengthen the surplus weir; the remainder of the excess was shown by the comparative statement to be caused by

- 1<sup>st</sup> an increase of earth work from Cubic Yards 6742 to 9167.
- 2<sup>nd</sup> a new item - 40 Cubic Yards of loose Laterite stone work.
- 3<sup>rd</sup> a small sum for sundries.

Captain Robert's letter was entirely silent as to the reason for the great difference in the quantity of earth work and as to the necessity for the stone work.

2. In transmitting the revised estimate, the Acting Super Engineer mentioned that the work would still be very remunerative as the revenue in the first year would be Rupees 1600.

The

3. The Acting Chief Engineer, after examining the papers accompanying the revised estimate, pointed out that no explanation of the cause of more than half the excess had been given, and, with reference to the expected revenue he noticed that the Ajacut assessment of the lands under the tank, as entered at the head of the abstract revised estimate was Rs 162-5-3 and the highest year's revenue Rs 191, while in the Super Engineer's letter printed in G. O. 1<sup>st</sup> May 1869 No 1428 Rs 658 were mentioned as the expected increase of revenue. The

Chief

when the estimate was made.

Chief Engineer moreover  
remarked that if the larger  
revenue (1600 Rupees)  
reported to be anticipated  
were due to an estimated  
increase of the acreage it  
would be necessary to  
show that the tank could  
hold a sufficient supply  
of water.

To the very proper  
and necessary remarks  
of the Chief Engineer  
upon the revised estimate  
as submitted by Captain  
Roberts, the latter officer  
takes exception in his  
letter of the 24th October.  
The Government regret  
that the Super Engineer  
should have adopted  
this course, because otherwise

ow

16. 10. 24  
on the receipt of the addi-  
tional information, the  
estimate would have  
been disposed of without  
any special notice being  
taken of the way in which  
it had been submitted  
for sanction. Now, however,  
the Govt must remark  
that Captain Roberts  
afforded very insufficient  
explanations, and that  
important alterations  
in a work sanctioned  
by the Govt. and therefore  
inadmissible without  
their previous concurrence,  
appear to have been in-  
troduced. Captain  
Roberts moreover speaks  
of the excess as a trifling  
amount, but it was no  
less

less than 17 per cent on  
the sanctioned estimate,  
and such an increase  
demanded full and clear  
explanation.  
5. The way in which  
the Super Engineer has  
dealt with the revenue  
aspect of the project likewise  
calls for notice. The  
capabilities of the tank  
came under discussion  
because Captain Roberto,  
without adducing any  
evidence, put the increase  
of revenue expected at  
Rs 1600, instead of Rs 658.  
He was asked to explain  
how this great difference  
was to be accounted for,  
and his reply shows how  
necessary it was that the  
statement

50  
statement he had made  
should not have been  
accepted in the absence  
of particulars showing  
upon what data it had  
been based. Captain  
Roberto appears to consider  
that a tank holding,  
when full, 604,267 cubic  
yards, and therefore capa-  
ble of irrigating, according  
to the usual allowance,  
about 100 acres of land,  
is likely to fill so fre-  
quently as to be able  
to irrigate about 200  
Cawnies or 529 acres.  
Before this opinion can  
be accepted, it will be  
necessary for the Super  
Engineer to show that  
other tanks similarly  
circumstances

circumstances irrigate in proportion to their capacity; and decrease at all corresponding. In the meantime the Government think that the former estimate, Rs 658, of the revenue to be derived is far more likely to prove correct.

6. The revised estimate, Rs 2080, which includes an addition of Rs 35 for increasing the height of the wing walls of the waste weir is sanctioned, and the sum, Rs 690, required to complete the work should be appropriated from the grant. This can be supplemented for minor new works if necessary.

Agricultural

Agricultural, there being no funds available from the Reserve.

My. 2/11/70

Abb

To  
The S. Engr & Inl  
Controller  
Rev. Secy.  
Chief Engr. for  
Irrigation

Recd 22/11/70

12/3/2 3384

Govt. of (1870) Madras.

PUBLIC WORKS.

To the Superintending Engineer  
6th Division

Date

Recd.

24

G. 212/200 N. 2797.

Nos. 139 (10 39)

Peracunchi Ruined Tank. The  
revised estimate of Rs. 2,000 for  
the restoration of the Peracunchi  
Ruined Tank in the South  
Arast District, sanctioned  
with remarks.

19

1919

1919