

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 283/-32
B.P. No.

Press
Mis.

Dated 1 - 10

195
18/5

Not to be folded or roughly handled

with 25 of June order

PUBLIC WORKS DEPARTMENT,
OOTACAMUND, 1st October 1875.

No. 10.

No. 2,832.

FROM

MAJOR-GENERAL G. W. WALKER, R.E.,

Secretary to the Government of Madras,

Public Works Department,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,

Public Works Department.

IRRIGATION, No. 2.
Account.

SIR,—In Colonel Crofton's letter of the 19th August 1874, No. 517 I., the Government of India requested information on the following points in connection

with the Striviguntum Anicut Project in the Tinnevely District, for which revised estimates, amounting to Rupees 10,40,480, had been submitted :—

- (1.) The amount of the revised estimate including establishment and other charges ;
- (2.) The causes of excess over the original estimate ;
- (3.) The net income to be derived from the outlay ; and,
- (4.) The probable supply of water according to the latest data.

2. I am, in reply, to submit the accompanying correspondence with Proceedings of Government thereon. It will be observed from the Note of the Chief Engineer for Irrigation, that after making the necessary corrections for establishment charges, &c., the amount of the estimate has been increased to Rupees 11,33,087. Owing, however, to the date on which the works should be considered to come into operation not having been fixed, it has not been practicable to calculate the interest charges. The local officers have, however, been referred to on this point.

3. The causes of increase over the original estimate will be found explained in the District Engineer's letter, No. 17, dated 19th April 1875.

4. In connection with the third point on which information is required, I am to invite attention to paragraph 5 of the Chief Engineer's Note and to the Proceedings in the Revenue Department to which it alludes. It will be observed that the returns for the south side of the river only are given, but the settlement of the north side is now

in progress, and on its completion a further communication will be addressed to the Government of India.

5. Paragraph 6 of the Chief Engineer's Note gives the probable supply of water according to the latest data.

I have the honor to be,

Sir,

Your most obedient servant,

Major-General, R.E.,

Secretary to Government.

70B
30 1/2
From Captain L. CONWAY-GORDON, R.E., Controller of Public Works Accounts, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Fort St. George, 21st August 1875, No. 11 I.

With reference to your letter of the 16th July 1875, No. 760, and to G. O. of 16th November 1874, No. 3,231, I have the honor to forward a statement showing approximately the direct and some of the indirect charges which, in the light of present information, seem fairly debitable to Striviguntum Anicut system from the commencement of the work to the close of the year 1874-75.

2. The sums entered under compensation for land, works, and tools and plant represent expenditure incurred directly on account of the anicut system.

3. Under establishment, the actual cost of the special establishment employed, together with a charge of 5 per cent. of the outlay on works, had been entered for the period during which the works constituted a separate charge; for the remaining period the charges for establishment have been taken at 25 per cent.

4. The Collector of Tinnevely has not yet furnished the information required to enable this office to capitalize the abatement of land revenue; and in the absence of information regarding the date from which the works are to be considered to have come into operation, this office cannot calculate the interest charges.

5. To prevent misunderstanding, I may as well point out that the figures given in the statement now forwarded are to be regarded as simply an indication of alterations which are likely to be made in the Capital Account of the Striviguntum Anicut system when that Capital Account is in its turn systematically taken in hand; that the proportional charges on account of establishment must in particular be regarded as liable to further revision when Government have determined the principle on which such charges are to be apportioned; and that in the regular monthly accounts of Capital outlay on Irrigation Works no alteration will for the present be made.

Striguntum Annual Works.

Year.	Preliminary ex- penses.	Compensation for land taken up.	Works.	ESTABLISHMENT.			Tools and Plant.	Total.	Capitalization of Assessment.	Total to end of the year.	Interest at 4 1/2 per cent.	Grand Total.
				Special.	Proposed charges for Direction and Accounts.	Proposed charges for Establish- ment.						
1867-68	Rs. ...	Rs. ...	Rs. ...	Rs. 4,695	Rs. ...	Rs. ...	Rs. 4,695	Rs. ...	Rs. 4,695			
1868-69	Rs. ...	Rs. ...	Rs. 98,469	Rs. 18,732	Rs. 4,923	Rs. ...	Rs. 23,655	Rs. 6,000	Rs. 1,28,124			
1869-70	Rs. ...	Rs. ...	Rs. 9,17,276	Rs. 18,363	Rs. 15,864	Rs. ...	Rs. 34,227	Rs. 105	Rs. 3,51,608			
1870-71	Rs. ...	Rs. 25,368	Rs. 72,143	Rs. 14,932	Rs. 3,607	Rs. ...	Rs. 18,539	Rs. ...	Rs. 1,16,050			
1871-72	Rs. ...	Rs. 688	Rs. 98,261	Rs. 9,348	Rs. 4,913	Rs. ...	Rs. 14,261	Rs. ...	Rs. 1,13,210			
1872-73	Rs. ...	Rs. 68	Rs. 1,50,507	Rs. 7,983	Rs. 5,586	Rs. 9,700	Rs. 23,269	Rs. ...	Rs. 1,73,344			
1873-74	Rs. ...	Rs. ...	Rs. 65,981	Rs. ...	Rs. ...	Rs. 16,495	Rs. 16,495	Rs. ...	Rs. 82,476			
1874-75	Rs. ...	Rs. 60	Rs. 6,51,871	Rs. ...	Rs. ...	Rs. 12,968	Rs. 12,968	Rs. ...	Rs. 64,899			
...	...	26,184	8,54,508	74,053	34,893	39,163	1,48,109	6,105	10,34,906			

a Included under "Works" in the annual Accounts.

b Of this amount, the sum of Rupees 1,000, being the gratuity awarded to Mr. Randall in G. O. No. 3443-A., of the 7th December 1874, was charged to "Works" in the accounts for January 1875; but has been removed to the debit of "Establishment, Provincial," in the accounts for June 1875, with reference to Accountant (General's (Public Works Department) No. 1,759 B., of 26th July 1875.

(Signed) J. MILLS,
for Controller of Public Works Accounts.

James ...

FROM

THE CONTROLLER,
PUBLIC WORKS ACCOUNTS,

TO

The Chief Engineer for Irrigation

FORT SAINT GEORGE, 21 August 1875.

Sir

With reference to your letter of the 16th July 1875, No. 160, and to G.O. of 16th November 1874, No. 3231, I have the honor to forward a statement showing approximately the direct and some of the indirect charges which in the light of present information seem fairly debitable to the Irrigation Ancient system from the commencement of the work to the close of the year 1874-75.

2. The sums entered under compensation for land, works and tools and plant represent expenditure incurred directly on account of the Ancient system.

3. Under establishment the actual cost of the special establishment employed together with a charge of 5 per cent of the outlay on works had been entered for the period during which the works constituted a separate charge; for the remaining period the charges for establishment have been taken at 23 per cent.

4. The Collector of Tirunelveli has not yet furnished the information required to enable this office to capitalize the abatement of land revenue; and in the absence of information regarding the date from which the works are to be considered to have come into operation this office cannot calculate the interest charges.

5. To prevent misunderstanding I may as well point out that

that the figures given in the statement now forwarded are to be regarded as simply an indication of alterations which are likely to be made in the Capital Account of the Struviguntum. Anicut system when that Capital Account is in its turn systematically taken in hand; that the proportional charge on account of establishment must in particular be regarded as liable to further revision when Government have determined the principle on which such charges are to be apportioned; and that in the regular monthly accounts of Capital outlay on Irrigation works no alteration will for the present be made.

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

Lowry-Gordon

Controller of P.W. Dept.

X^d A.F.

Cir. 27975 Oct 1-11-75
 Put 30 Sept

Submission Stk. of
 approximate chief's debt
 all to the Sheregunum
 Ancient System with
 remarks.

EO October 75 1883

56/000/75

No 118
 Dated 21 3 August 75.
 Rec 23
 Recd 24th

To
 The Chief Engineer
 for Irrigation.
 The Controller of
 P.W. Accounts
 Home

C. No 1674
 Rev.

Volunt P.W. 1084820-9-75

Sheregunum Ancient Works

Years	Sheregunum	Work	Establishment	Stock	Assessment	Grand Total
1867-68	68	98469	4925	4695	128124	23660
1868-69	69	317276	13663	24227	105	251605
1869-70	70	20369	72120	14931	3607	18539
1870-71	71	688	98261	9220	4913	14761
1871-72	72	68	129007	7903	5586	9700
1872-73	73	68	129007	7903	5586	9700
1873-74	74	68	129007	7903	5586	9700
1874-75	75	68	129007	7903	5586	9700
		26124	854508	74053	34595	39165
						148109
						6105
						10324906

A. Included under "Work" in the Annual accounts.

B. Of this amount, the sum of Rs 100 being the gratuity awarded to Mr. Randall in 1868 as a
 of the 75th December 1874 was charged to work in the accounts for January 1875, but has been
 transferred to the debit of "Establishment - Provincial" in the accounts for June 1875 with
 reference to Account General (P.W.O.) No 1750 E of 26 July 1875.

5/20

for Controller of P.W. Accounts.

1883

Office of the Controller of
Public Works Accounts
Madras, 19th December 1874

No 8342
From
The Controller of
Public Works Accounts
To
The Secretary to Government
Public Works Department
Fort Saint George

Sir,
I have the honor to request that
you will be good enough to hold over action
on my letter No 7937 of the 5th instant re-
garding the Streerigootum Ancient pro-
ject, until receipt of a further report
from this Office. Owing to the manner
in which the Accounts were kept, the
Charges in connexion with the project
appeared as part of the Charges of a Range
in which other works were in progress and
therefore the conclusion of this Office that
as, unlike the Madras Water Works, the
Streerigootum Project was not treated
as a separate Public Works charge, it
could not be regarded as having a special
or exclusive Establishment attached to it.
But from a letter received from the District
Engineer of Tirunelveli, I find that this
view was not a correct one and that there

No 94 of the 15th
December 1874

CC. 1/1674/75

No 1020/75

there was, for some years, a special Establishment employed on the project. I shall therefore have the matter carefully looked into and will in due course submit a Statement of the Charges for Establishment and Tools and Plant fairly debitable to the project.

I have the honor to be

Sir,

Your most obedient servant,

J. W. P.

Controller of
Public Works Accounts

14th April 1881

14th April 1881

14th April 1881

14th April 1881

14th April 1881

14th April 1881

14th April 1881

14th April 1881

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14th April 1881

14th April 1881

To Controller Genl 916 July 75
Di: 760

P. J. W. 1874 Sept.
Hon
No: 7968
The Controller of
P. W. Accounts

To
The Secretary to Government
Public Works Dept
Fort St George

Dated 19th December 1874
Dec 19
No 8342

Requests to hold
over action on his letter
regarding the Shreevignam
Irrigation Project.

Subj: Shreevignam Irrigation

W. H.

M. 6330/75.

901 October 75. 2831

No. 7

No: 1021. 19

Note by the Chief Engineer for Irrigation.

Encls. 24.

In L. O. of the 16th November 1874 No 3231
instructions were issued for the collection
of certain information required by the
Government of India in connection with
the Shreevignam Irrigation project. The
information is in some points not
yet complete, but Govt may desire to
have laid before them that which has
been obtained.

3. The information asked for referred
to the following subjects.

- 1st the cost of the works including
establishments and other charges.
- 2nd the causes of excess over original
estimates.
- 3rd the net income to be obtained from
the outlay.
- 4th water supply.

3. On the first point the District
Engineer has reported so far as dis-
charges are concerned, and his letter of the

19th April last contains also explanations of all causes of excess on works. It will be observed that the amounts of the items in nearly every case differ more or less from those of the estimate reviewed in June 1874. In most cases the differences are small, but in the following in which they are considerable special notice is necessary.

Ancient	increase	Rupces 24,260
the explanation given in para 5 of the District Engineer's letter above noticed does not account for this difference except that the cost of Portland Cement has been transferred from sundries to this work. The adjustment of the Contractors claims (Pro: Madras Govt 7 th December 1874 Note Paras 6 and 35) accounted for		
On the ancient.	Rupces 36,54	
" firewood principally for the do.	" 6,378	
" wells and well rings before improperly debited to sundries	" 7,323	
	<u>17,355</u>	

and the rest is made up of increases on

many items some of which at any rate ought to have been included in the estimate of 1873-74 as the expenditure has not been incurred since, e.g. rough stone boulders 1,500 Rupces.

The total of the estimate of 1874-75 as submitted by the District Engineer is Rupces 10,00,000, whereas that transmitted to the Govt of India was Rs 10,40,480. It has taken some trouble to investigate the differences, but the following is a summary.

	Increases	Decreases
Ancient	Rs 24,260	
Gravel bank side	" 5,197	
" Gravel "	" 6,483	12,750
Sundries		3,000
Land compensation		1,500
Capitalized assessment		
Special establishment		59,150
Engineering up to 1873		<u>36,940 - 76,400</u>
		40,500

The difference of 30 Rupces is hardly worth tracing, as it is due to some clerical error in calculation.

Why the District Engineer left out the

special Engineering establishment is not clear, but at any rate the amount must be restored to its place, and the estimate of 1844-45 then becomes

Rupees 10,59,150

This sum includes part of the establish-
ment charges viz special 59,150

viz special	57,150
" petty	42,000
	101,150

and to enable use to be made of the information furnished by the Controller the above must be deducted, leaving for work - 7,58,000 odd. Controller's statement of establishment up to 1874-75. - 148,100

148, 109

Tools and Plant

6105

The above establishment is for an ex-
-penditure of Rupees 3,52,508 and
Rupees 1,03,492 remained to be ex-
-pended, on which the Estab^t charge
at 25 per cent will be

2583

11,38,084

The Controller stated that his figures must be taken as an approximation, and he has not calculated the interest charges in the absence of information regarding the date from which the works are to be considered to have come into operation.

42

This date is somewhat difficult to settle as the South Channel was turned to account at a very early date, and one part after another has been subsequently utilized as soon as it was ready - If a date must be fixed arbitrarily probably the beginning of 1873-75 or early 1882 would be reasonable, but on this point the opinions of the Collector and District Engineer may with advantage be obtained.

5. The only Revenue information at present available is contained in the Oho. Quadras Est. as per margin. It is there shown that the recent settlement, made in special connection with the effect of this project, gives as the actual results an increase of revenue of Rupees 45,784, that probably had the project not been carried out there would have been a reduction of assessment of Rupees 20,000, the lands being over-assessed at the old rates considering the character of the former water supply, and that ultimately a further increase of Rupees 42,475 may be anticipated as population increases and

Recd. Aug. 10. 25.
 17th July / 15
 B. 10. 25.
 10th Aug.

and irrigation is extended. The above refers to only the South side of the river, the settlement of the North side not having as yet been completed. The irrigation on the south and north sides of the river respectively is expected to be 13,500 and 20,000 acres and the cost of the south side works may approximately be assumed to be as follows, exclusive of interest.

South Channel and subsidiary works side abstract estimate	Rupces
$\frac{3}{67}$ or say $\frac{4}{10}$ th of the following	2,15,406
Ancient	1,99,800
General charges, some of which have to be divided however	1,87,374
Special establishment	59,150
Tools and Plant	6,105
Further establishment charges (there is no information as to the outlay yet to be incurred on the two sides of the river but it is believed that most will be on north side)	25,873
	1,92,320
	<u>4,07,726</u>

Supposing interest 8% to raise the cost to 5 lacs of Rupces for this portion of the system, the results would be

On the actual settlement of Rs 45,784 - 9.2 per cent	13.2 - do
do. with 20,000 added	19.0
providing future increase of revenue	23.0
Rs 45,784 + 47,575	
do above with 30,000 added	

these would be the gross totals.

The District Engineer has furnished a statement showing the maintenance charges for a series of years from 1857-58. If 1872-73 be taken as the first year of the ancient system, then for 15 years before the average outlay was Rs 5,325 and for the 2 years after Rupces 15,530 or say 10,000 Rupces have to be deducted from the increase of Revenue, and for the South side the deduction would be 4,000 Rupces.

It appears to be quite impracticable at present to forecast accurately the results of the outlay on this system of irrigation, but on the whole the prospect of a fair return is encouraging.

6. Lastly with respect to water supply. In parity of the note on the revised estimates printed in No. Madras Est.

8th June 1874, Dec 1898 were given calculations of the
 quantity of water required ^{C. 800} 297.48 millions
 & do probably available 311.43 "
 while the District Engineer reports that in
 1873-74 there were 468.36 " vide state-
 ment.
 and in 1874-75 383.71 "

Wm. Mullins
 Chief Engineer for Irrigation
 Leathfald R.E.

Colacamund
 30th September
 1875

To The Secretary to Government
 S.A.C.

Jan 7 831

R.M.

26

297.48
 311.43

468.36
 383.71

297.48
 311.43

468.36
 383.71

297.48
 311.43

468.36
 383.71

P. W. 1875 Dept.
No. 6390

From

The Chief Engr.
for Irrigation.

Dated 20 Sept.
Recd 1st Oct. 1875.

E. 4 No. 1084

Note on the Strivigantam Ancient
Project.

L6. 2832. 1-10-75.

1875

No 2831

P.W.

26

Pro. of the Madras Govt. Engr.

Under date the 1st Sept 75
From Cont. P. W. (No. 1083 & 2 of 17 Sept 75)
Dist. Engr. Annamalai (No. 1084 of 19th Sept 75)
Controller of P. W. (No. 1084 of 21st Sept 75)
The Chief Engineer for Irrigation } (H. E. No. 1084 of 21st Sept 75)

14

The information con-
tained in the foregoing
papers, though not quite
complete either as regards
the probable cost of the
Strivigantam ancient pro-
-ject, or the returns to be
obtained from the iriga-
-tion under it, will
nevertheless afford the
Government of India a
fairly clear ^{view} of its
circumstances. As soon
as the Revenue informa-
-tion for the lands under
the North Channel may
be available a further

MM
25/10

report will be made to the Govt of India, and in the meantime the annual statements of area irrigated and revenue, in the form prescribed for all important irrigation works, should be completed as soon as possible.

2. The interest charges being, as the Controller states, dependent upon the date from which the interest works are to be considered to have come into operation, the District Engineer will in communication with the Collector, and in connection with the remarks in the note of the Chief Engineer for Irrigation, report from the beginning of what year this date should be fixed.

Yrs

15 27
3. The differences between the estimate of 1873-74 and that of 1874-75, so far as they were caused by the settlement made with the late contractor may be admitted to be reasonable, and it is presumed that many others were first brought to light during the detailed examination of the accounts made in investigating the Contractor's claims. Undoubtedly the accounts were kept in a manner very far from satisfactory, but notice of the irregularities has already been taken in passing orders on the late Contractor's claims.

Ordered

P. M. L. Secy to Govt dated 7th Dec 1874

Ordered that the following letter be sent.

Ms 23/9

sc 6072-19-10-75

D. R. Linnereilly — 5
 Chdms for mgs — 5
 Cms P. & Accts — 5
 Rev. Rept. — 8
 Board of Revenue 14

Office 17 G. 2 India 26

No 2832

¹⁸⁸²
 Public Works Dept
 1st Oct 75

To The Secy. to the Govt of India
 Public Works Dept.

Sir,

In Colonel Crofton's letter of the 19th Sept. 1874 No. 517, the Govt of India requested information on the following points in connection with the Shrivignatam Ancient Project in the Tanjore District for which revised Estimates amounting to Rs 10,40,480 had been

MB
 3079

been submitted.

- (1) The amount of the revised estimate including Estab^t and other charges.
- (2) the causes of excess over the original estimate
- (3) the net income to be derived from the outlay, and
- (4) the probable supply of water according to the latest data.

I am in reply to submit the accompanying correspondence with Proceedings of Gov^t thereon. It will be observed from the Note of the Chief Eng^r for Irrigation that after

29
after making the necessary corrections for Estab^t charges &c, the amount of the Estimate has been increased to Rs 1,13,808/-

Owing however to the date on which the work should be considered to come into operation not having been fixed it has not been practicable to calculate the interest charges. The local officers have however been referred to on this point.

The causes of increase over the original Estimate will be found explained in the Dist^r Engineer

Engineer's letter No 14
dated 19th April 1875.

In connection
with the third point
on which information
is required, I am to
invite attention to para
5 of the Chief Engineer's
Note and to the Pro-
ceedings in the Revenue
Dept. to which it alludes.

It will be observed that
the returns for the South
side of the river only
are given, but the settle-
ment of the North side
is now in progress, and
on its completion a further
communication will be
addressed to the Govt.
of India.

Para

98 Para 6 of the
Chief Engineer's Note
gives the probable
supply of water accord-
ing to the latest data.

6 + 25 mhe
Previous No. 19-10-75

19-10-75

6330

Publ. of 1875

PUBLIC WORKS.

and previous
2831 to 2833
as well as
of 2830 No. 108-31
Sept. 19
referred to in note by
the bridge.

10. 10. 2831. 32

Nov. 7-9

10

Investigations Ancient
project, Tennessee St.
having order on
it by the Chief Eng.
or Brigations submitting
tain information
d for, regarding

12/10