

Continued by the City of New York
 to the City of New York
 1855

The Commission of the City of New York
 is hereby ordered to pay the sum of
 \$100.00 to the City of New York
 for the use of the City of New York
 1855

B. No. 1151 W. d. 15 May 1855
 15.14
 13/5

13/5/55

12/21/55

12/21/55

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 15th May 1885

Read the following:—

Endorsement by the Supg. Engr. } H.C. N^o. 153 S. J. of 29th April 1885.
II Circle

Endorsement by the Chief } — do — 9th of 9th May 1885
Engr. for Supg. Engr.

The Examiner of P. W. Accts.
is authorized to pass the pay-
-ment of the advance of Rs 60/-
made to Kistnasawmy Iyer,
temporary overseer in the
Lower Coleroon Irrigation Project
Division.

Cur
6.5.85

US
11-5-85

Dr
9/5/85

Supg Engr VI Circle
for Engr +
P. W. Accts

+ 2 Disallowance list

sent to J office for
1885 P. W. 61C of 1885 - S. P. 10-8-85

312 W 7/19/12/04

1709 W 7/10/6/03

524 8/17/3/04

Recd 4/1/85

10/13/5/85

Engr

Cur 5/2/85

From the Superintending Engineer, b Circle,
N^o 153. I. J. dated 29th April 1885.

N^o 90. I.

Thro' W

Submitted to Government.

2. As the Examiner of Public Works Accounts requires, under G. O. N^o 1709. W, d/18th June 1883, the sanction of Government to enable him to pass the payment of an advance of Rs 60 made by the Executive Engineer of the Lower Coleroon Irrigation Project Division to temporary Overseer Krishnaswami Syer to meet the expenses of his transfer, it is recommended that the Examiner of P.W. Accounts be authorized to pass the payment of the advance which will be recovered in six monthly instalments.

Ostacammund
7th May 1885.

Asstnt. Colonel R.
Chief Engineer for Irrig.

To The Joint Secy. to Govt. P.W.D. Sd.

Encls. 3.

W/5327

Forwarded to the Chief Engineer
for Irrigation for disposal.
The advance was made prior
to the transfer of the S^u
to this circle.

M. M. S. S. S.
Superintending Engineer
b Circle

29/10/85
resp'd 1/5

From,

The Executive Engineer
L. Col. Sd. P. S.

L. The Supg. Engineer
b Circle
Trichinopoly



N^o 258
W/2264/5

Dated 24
Despd 24
Recd. } April 1885

Enclosures 2

Subject

Disallowance Lists. For-
wards - from the Examiner
with explanations and
with a request to have
the advance to Overseer
Krishnaswami Syer con-
firmed by the Chief
Engineer.

SPECIAL DIVISION, D.P.W.

From

THE EXECUTIVE ENGINEER,
L. COL. IRR. PRO. DIVISION,
CUDDALORE.

To

The Superintending Engineer
6 Circle

Camp Annamalai

Trichinopoly

No. 258 of 1885.

Dated 24th
Despd.

April

1885.

Sir,

2 ENCLOSURES

I have the honor to forward
the enclosed Disallowance List on
the Salary Bill for March 1885, and
with reference to the same beg to request
that the Chief Engineer may be
asked to have the advance confirmed
as requested by the Examiners.

I have the honor to be,
Sir,
Your most obedt. servant

J. Lobb.

Executive Engineer
L. Col. Irr. Pro. Div.

had been strongly recommended by
the Executive Engineer there and who
was a man I personally knew as
being a good draughtsman. The
Chief Engineer promised to represent
matters to the Govt. and obtain
special sanction to this man's appoint-
ment.

2. This applicant Tirovengadam
Modi has now written to say that
he has accepted the appointment,
and will be here about the 25 instant.
May I request the favour of your
kindly reporting the matter to the
Chief Engineer, and asking him to
have the appointment confirmed.

I have &c &c
(Signed) J. Lobb
Executive Engineer
L. Col. Irr. Pro. Div.

(True Copy)

J. Lobb.
Executive Engineer
L. Col. Irr. Pro. Div.



16/12/85

W/4
4264/15

No 179

From,

The Executive Engineer

L. Col: Lr: Poro: DW

To,

The Suptg: Engineer

6 Circle

Trichinopoly

Camp Annappet 20 March 1885-

Sir,

I have the honor to report that although I advertised in the Gazette for more than a month for Draughtsmen; none of the applicants who replied possessed certificates qualifying them for the post of Head Draughtsman. The Chief Engineer knowing this, and being unable to procure a man for the Division himself, authorized me to offer the appointment to an applicant at Hyderabad who, did not possess any College certificates, but who



GENERAL
ESTABLISHMENT.

R/3037

Govt. of 1884 Madras.

PUBLIC WORKS.

Dated December, 19th.

Recd.

Encl.

G.O., 19th Dec. 1884, No. 3121 W.

DECEMBER.

Lower Coleroon Irrigation
Project

Revised estimate for investigation of the
—, sanctioned.



IRRIGATION.
ACCOUNT.

RS-786

Govt. of (1884) Madras.
PUBLIC WORKS.

Dated May, 27th.

Recd.

Encl.

G.O., 27th May 1884, No. 504 I.

MAY.

Sangam Anicut Project

Revised estimates, amounting to Rs. 1,28,958, for the first 14 miles of the Southern channel, which takes off from the Kanigiri tank, of the — together with the connected drains, sanctioned.

19TH DECEMBER 1884, No. 3121 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper :—

No. 104 E.W.

Note by the Chief Engineer for Irrigation.

The following revised estimate, amounting to Rs. 26,745, for the investigation of the Lower Coleroon Irrigation Project, is recommended for sanction in lieu of the one sanctioned in G.O., No. 2167 W., dated 3rd September 1884.

1 Executive Engineer	RS.
4 Overseers	650
2 Clerks	320
2 Draughtsmen	50
2 Messengers	85
30 Lascars	14
	180
Total ...	
Travelling allowance	1,299
Contingencies	399
	85
Total per mensem ...	
	1,783
Total for 15 months ...	
	26,745

2. The amount of survey and levelling work required to be done for the complete investigation of the project renders it probable that the establishment will be required for 15 months instead of for six months as was originally anticipated. Rs. 10,698 of the estimate will be spent during the current year, and the balance, Rs. 16,047, during the ensuing year.

CHEPÂK,
15th December 1884.
To the Chief Engineer, Public Works Department.

(Signed) A. S. RUSSELL,
for Chief Engineer for Irrigation.

ORDER—dated 19th December 1884, No. 3121 W., Public Works.

The revised estimate submitted by the Chief Engineer for Irrigation is sanctioned in supersession of that sanctioned in G.O., No. 2167 W., dated 3rd September 1884.

2. The Executive Engineer in charge of the project belongs to the permanent establishment, and no addition to the temporary Engineer establishment is thereby involved.

3. The sanction accorded in these proceedings has been registered as Provincial No. 76 W. of 1884-85, and classified as Establishment, Temporary.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
„ Superintending Engineer, VI Circle.
„ „ „ „
„ Examiner, Public Works Accounts.
Exd A. Aubert.
Spare Copies

4. The amount provided in the revised estimate for compensation for land required for the first 14 miles is Rs. 1,133 more than the amount originally provided for the entire channel owing to the increase in the value of land.

5. The amount of existing sanction shown against item 2 was sanctioned in G.O., No. 952 I., dated 28th November 1882, but as the rates in this estimate are insufficient the estimate has been increased to Rs. 13,150.

6. The alterations made in the designs are approved. One fall and one aqueduct are unnecessary and two escapes, which were not included in the original estimates, have been provided. Eleven irrigation sluices and a regulating dam are considered sufficient for minor channels, instead of thirteen irrigation sluices as originally proposed.

Lump sums have been provided for eleven minor channels for which detailed estimates have not been prepared as the arrangements have not been settled.

7. The original estimates for the drainages connected with the first portion of the channel have also been revised as shown below :—

		Original Estimate.	Revised Estimate.
		RS.	RS.
1. Drainage to Maldavy.	B. Land ...	...	158
2. Do. do.	L. Earthwork ...	250	895
3. Chellayapallem channel.	B. Land ...	...	874
4. Do. do.	L. Earthwork ...	6,060	4,510
5. Duvur drainage channel	do. ...	200	200
6. Drainage channel at 7th mile, 3,672 feet,	B. Land ...	...	213
7. do. do.	L. Earthwork ...	...	730
8. Drainage channel in 14th mile	do. ...	500	500
	Total ...	7,010	8,080
		...	7,010
	Excess ...	...	1,070

Detailed estimates for items 5 and 8 have not yet been received.

Deducting the excess on the drains from the saving effected on the channel the net saving is Rs. 29,787, which may be added to the balance available for unforeseen works. The revised estimates for the channels and the drains are recommended for sanction.

Ootacamund, 19th May 1884. (Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.
To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

ORDER—dated 27th May 1884, No. 504 I., Public Works.

The revised estimates, amounting to Rs. 1,28,958, for the first 14 miles of the Southern channel, which takes off from the Kanigiri tank of the Sangam anicut project, together with the connected drains as shown in the comparative statement received from the Superintending Engineer, are sanctioned under N. Expenditure on Productive Public Works, Capital Account, 51 Irrigation and Navigation. The net saving of Rs. 29,787 is added to the balance available for unforeseen works, which will then be Rs. 1,16,715.

2. This sanction has been registered as No. 35 I. of 1884-85.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, II Circle, with forty-nine enclosures.

„ Chief Engineer for Irrigation.

„ Examiner, Public Works Accounts, with eleven abstract estimates.

„ Revenue Department.

Exd. E. Fernandez.

Spore Copies

Rs. 43,545. In G.O., No. 952 I., of 28th November 1882, a revised estimate for the head-sluice, Rs. 9,330, was sanctioned but a revised estimate, Rs. 13,150, is now submitted, and taking this into account the total saving is Rs. 31,875 as shown in the comparative statement.

6. An increase has been allowed under compensation for land owing to the increased value of land.

7. There is a saving on nearly every other item owing to the designs for masonry works being simpler than originally proposed.

8. No escapes were allowed in the original estimates and two have now been provided, the first, at 3 miles 1,980 feet, will discharge into the Covur drainage channel, and the second, at 13 miles 970 feet will discharge into the Vegur channel.

9. The longitudinal section gives full information regarding fall, velocity, soil, &c., and the section is given for the whole length of channel so that it can be seen how the latter part fits into the 14 miles for which detailed estimates are now submitted.

10. Drainages.—Four drainages will cross the line of the channel and longitudinal sections, and estimates for them are submitted. The total cost of these drainages is Rs. 8,080, against Rs. 7,010 allowed in original estimates; the excess is caused by compensation for land and also to one of the channels required, viz., that at 7 miles 3672 feet now being included in revised estimates.

(Signed) D. Mc.N. CAMPBELL, Captain, R.E.,
Executive Engineer.

No. 94 I.

Submitted to Government.

2. The revised estimates for the first 14 miles of the Southern channel, which takes off from the Kanigiri reservoir of the Sangam anicut project, compare as follows with the existing sanctions :—

		Existing Sanctions.	Revised Estimate.
		RS.	RS.
1	B. Land ...	6,085	7,218
2	C. Works ...	9,330	13,150
3	Do. ...	13,930	17,430
4	Do. ...	31,850	12,315
5	Do. ...	4,100	4,380
6	Do. ...	...	3,286
7	Do. ...	8,450	3,267
8	Do. ...	3,150	...
9	Do. ...	2,400	...
10	Do. ...	13,950	5,197
11	Do. ...	...	390
12	L. Earthwork ...	53,790	50,495
13	Do. ...	4,700	3,750
	Total ...	1,51,735	1,20,878
		1,20,878	...
	Net Saving ...	30,857	...

3. The existing sanction for the entire channel is Rs. 2,72,020 as shown below :—

	RS.
Proceedings of Madras Government, No. 467 I., of 28th July 1881—	
Feeder to supply the Southern and Central channels	80,690
Southern channel	2,03,000
	2,83,690
Deduct amount transferred to unforeseen works in G.O., No. 952 I., dated 28th November 1882	11,670
Net amount	2,72,020

Report on Revised Estimate for 14 Miles of the Southern Channel, Sangam Project.

An estimate for the first 14 miles of the Southern channel has been sent in by the Executive Engineer, Sangam Project division.

Reports on the estimates by Mr. Berlie, who has worked out the revised designs, and by Captain Campbell are forwarded.

In the length of channel for which a complete revised estimate has been got out, there is no serious alteration in Mr. R. Smith's final proposals. The designs for the masonry works have been much cheapened by substituting masonry for iron pipes allowed by Mr. Smith.

The proposal to call the channel from the head-sludge in Kanigiri tank onwards the Southern channel, and to get rid of the small section called in the sanctioned estimates "feeder to supply the Southern and Central channels" has already been approved (*vide* paragraph 11 of inspection notes of Chief Engineer for Irrigation for January 1884).

The designs for the minor masonry works are similar to those already sanctioned for other distributaries and call for no special remark.

The water passing under the proposed drainage culvert at 7 miles 3,672 feet, passes from left to right and is eventually to be discharged into the river, and a sluice has to be built in the river embankment. The Executive Engineer has been requested to get out the estimate for this as soon as possible, and they are promised in a few days.

As regards the escapes, the Executive Engineer designed flush crested weirs with their crests at channel F.S.L. Such works are unsuited to a channel which does not receive any land drainage. The object of the escapes is to prevent the channel becoming dangerously full by the sluices being shut. A weir with crest at F.S.L. would pass but a small quantity of surplus and the water might rise dangerously high where the channel section is diminished.

The plans of the two escapes at three miles 1,980 feet and 13 miles 970 feet discharging into the Covur and Vegur (old river channels, respectively) have been revised in this office. The crests have been placed 2 feet below F.S.L. and the crest has been made long enough to pass off the difference in the discharge of the channel, when running at F.S.L., and two below F.S.L. The escapes have been fitted with screw gearing shutters to admit of their being quickly and easily worked. The shutters to be raised by the channel establishment, should occasion arise.

Lump sum amounts have been entered for the minor channels. For these, complete estimates will be worked out and forwarded for sanction.

The rates are suitable.

On the first 14 miles of the channel for which the details have been completely worked out, there is a saving of Rs. 29,787.

The estimates are recommended for sanction.

MASULIPATAM,
29th April 1884.

(Signed) J. W. RUNDALL,
Superintending Engineer, II Circle.

Report to accompany Revised Estimate for 14 Miles of Southern Channel and the Drainages connected therewith.

It was originally proposed to take off a channel, to be called the Bank channel, from the main canal near Sangam and end it in the Panchedu tank in order to supply, during freshes, the Central and Southern channels which were to take off from this tank; on the subsidence of the freshes these two last-named channels were to be supplied from the Kanigiri tank by the "main feeder," which was to join the heads of the Central and Southern channels in the Panchedu tank.

2. The Chief Engineer for Irrigation, when revising the scheme, ordered the Bank channel to be omitted and the Central channel to be taken off much higher up the main feeder.

3. When these alterations were made, the term main feeder should have been altered also, but this was not done, and what is now called the main feeder is the first 2½ miles of a channel at the end of which there is an off-take or regulator, but which is continued by the name of the Southern channel. If any part of the channel from the tank is to be called the main feeder it should only be the first 56 chains or down to the point where the Central channel takes off, but it is thought that it would be much better if the whole length of the channel from the head at the tank were called the Southern channel, and the Central channel were considered a branch of it. In the estimates and comparative statement now submitted this has been done and the cost of the first 2½ miles of what is now proposed to be called the Southern channel is compared with the cost of what is called in the classified abstract printed with G.O., No. 467 I., dated 28th July 1881, the "feeder to supply the Southern and Central channels."

4. The Southern channel (now called) will leave the Kanigiri tank by a sluice now under construction and will run in a southerly direction for about 3½ miles and then turning east will follow the general direction of the river. Its total length will be 25½ miles. The line of the channel is the same as that chosen by the late Mr. R. Smith, but the bed width and fall and other details have been considerably altered and a saving effected thereby.

5. The total amount of the estimates now submitted is Rs. 1,19,860, against Rs. 1,63,405, the amount originally sanctioned in G.O., No. 467 I., dated 28th July 1881, the saving is therefore

Comparative Statement showing Original and Revised Estimates—Continued.

Main Head.	Sub-head.	ORIGINAL ESTIMATE.				REVISED ESTIMATE.				Remarks.	
		Items.	Amount of individual work.	Total of Sub-heads.	Total.	Items.	Amount of individual work.	Total of Sub-heads.	Total.	Excess.	Decrease.
L. Earth-work.	Ducur Drainage Channel.	Earthwork	200	200	...	Earthwork	200	200	...	...	...
		Total	...	200	...	Total	...	200	...	...	...
		Drainage Channel at 7th mile 3672 feet.	...	...	...	Drainage Channel at 7th mile 3672 feet.	213	213	...	...	...
		Compensation	...	...	...	Compensation	730	730	...	...	...
B. Land.	Drainage Channel in connection with culvert 14th mile.	Earthwork	...	...	...	Earthwork	...	...	...	...	...
		Total	...	...	...	Total	...	...	...	...	...
		Earthwork	500	500	...	Earthwork	500	500	...	...	...
		Total	...	500	...	Total	...	500	...	...	...
L. Earth-work.	(4) Drainage and Protective Works—cont.	Earthwork	...	...	...	Earthwork	...	...	...	...	...
		Total for (4) Drainages	...	...	7,010	Total for (4) Drainages	...	...	8,080	1,746	676
		Grand Total	...	...	1,58,745	Grand Total	...	...	1,28,958	1,746	31,533
											Saving 29,787.

(Signed) J. W. RUNDALL,
Superintending Engineer, II Circle.

29th April 1884.

Do. ...	1 Aqueduct do. ...	2,400	...	...	...	1 Escape at 13th mile 970'.	1,693	...	...	...	Do.
Do. ...	1 Drainage culvert in 14th mile.	6,600	...	...	...	1 Drainage culvert 13th mile 1368'.	2,430	...	...	...	Do.
Do. ...	1 Bridge in the 14th mile.	1,450	...	...	...	1 Bridge at 13th mile 1793'.	2,960	...	...	...	Do.
Do. ...	1 Fall in 14th mile	3,150	...	...	...	2 Irrigation sluices at 536 Do. do. at 425	1,072	...	...	...	Do.
Do. ...	13 Irrigation sluices	13,950	...	...	...	1 Do. do.	725	...	...	...	Do.
Do. ...		...	...	...	...	1 Regulating dam	390	...	...	...	Do.
L. Earth-work.	Excavation and banking...	53,790	87,160	...	...	Excavation and banking	50,495	...	...	...	Do.
Do. ...	1 Distribution channel	600	...	...	...	3 Distribution channels	1,800	...	...	...	
Do. ...	1 Do. do.	350	...	...	...	6 Do. do.	1,500	...	...	...	
Do. ...	3 Do. do.	1,800	...	...	...	1 Do. do.	300	...	...	...	
Do. ...	6 Do. do.	1,500	...	...	...	1 Do. do.	150	...	...	...	
Do. ...	1 Do. do.	300	...	...	...	Total for (3) Distributaries	54,245	...	1,20,878	30,857	
Do. ...	1 Do. do.	150	58,490	...	1,51,735	Drainage to Maltary.	...	...	...	...	
B. Land.		...	...	...	...	Compensation for land	158	158	...	...	Do.
L. Earth-work.	Earthwork	250	250	...	...	Earthwork	895	895	...	...	Do.
	Total ...	...	250	...	...	Total ...	...	1,053	803	...	
	Challayapallem Drainage Channel.	...	...	...	...	Challayapallem Drainage Channel.	...	...	...	...	
B. Land.		...	...	...	...	Compensation for land	874	874	...	...	Do.
L. Earth-work.		6,060	6,060	...	...	Earthwork	4,510	4,510	...	...	Do.
	Total ...	...	6,060	...	...	Total ...	...	5,384	...	676	

SANGAM PROJECT DIVISION.

ENCLOSURES.

COMPARATIVE Statement showing Original and Revised Estimates.

SOUTHERN CHANNEL.

Main Head.	Sub-head.	ORIGINAL ESTIMATE.			REVISED ESTIMATE.			REMARKS.	
		Items.	Amount of individual work.	Total of sub-heads.	Items.	Amount of individual work.	Total of sub-heads.	Excess.	Decrease.
B. Land...	...	Compensation	...	RS. 6,085	Compensation for land for 14 miles.	7,218	RS. 7,218	RS. ...	Estimate here-with.
C. Works.	...	Head-sluice	...	6,085	Head-sluice	13,150	7,218	...	Estimate here-with, original estimate, Rs. 21,000.
Do. ...	...	Bridge	...	...	Bridge at 1011'	4,720	...	...	* Sanctioned in G.O. No. 952 I., 28th Nov. 1882.
Do. ...	...	Drainage culvert ...	...	...	Drainage culvert at 1285'	2,890	...	...	Estimate here-with.
Do. ...	...	Bridge over Duvur drainage channel.	...	...	Bridge over Duvur drainage channel.	2,810	...	...	Do.
Do. ...	...	Regulating sluice	...	...	Regulating sluice...	4,380	...	...	Do.
Do. ...	...	Drainage culvert	...	...	Drainage culvert at 1st mile 1980'	3,100	...	...	Do.
Do. ...	...	Bridge	...	...	Bridge at 1st mile 3135'	2,395	...	...	Do.
Do. ...	...	Bridge at 4th mile 1980'	...	...	Escape at 3rd mile 1980'	1,593	...	...	Do.
Do. ...	...	Bridge in 6th mile	...	...	Bridge at 4th mile 1718'	2,395	...	...	Do.
Do. ...	...	Drainage culvert in 7th mile.	...	...	Bridge over drop 5th mile 3894'	2,150	...	...	Do.
Do. ...	...	Do. 8th do.	...	...	Drainage culvert at 6th mile 1519'	1,695	...	...	Do.
Do. ...	...	1 Fall in 9th mile	...	...	Do. 7th do.	2,200	...	...	Do.
Do. ...	...	1 Fall in 12th do.	...	...	1 Fall at 7th mile 5184'	865	...	...	Do.
			...	...	1 Fall and Bridge 11th mile 1020'	2,402	...	...	Do.

27TH MAY 1884, No. 504 I., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

From J. W. RUNDALL, Esq., Superintending Engineer, II Circle, to the Chief Engineer for Irrigation, dated Masulipatam, 29th April 1884, No. 92 S.G.

I have the honor to forward, for your approval and the sanction of Government, revised estimates for the first 14 miles of the Southern channel, Sangam project, amounting to Rs. 1,28,958.

2. The details of the work are explained in the accompanying reports by the Executive Engineer and Mr. Berlie, Sub-Engineer.

3. A few alterations have been made in my office, which are explained in my report.

4. By completing the Southern channel for 14 miles, the water will be carried across the trunk road, and several tanks supplied from the Kanigiri reservoir. It will, when this is done, be possible to close the Kovur and Vegur river channels, the latter of which has an open head, which is a source of danger and damage whenever there is a high flood in the Pennér.

5. I hope the estimates will be approved by you and that early sanction will be granted.

6. The revised estimates for the rest of the channel are under preparation, but the early completion of the first 14 miles is very necessary.