

Public Works (1896) Department.

G.O., No. 1479

148

DATED 10/2/96

[Despatch Abstract.]

Surplus Water of the Kaniyiri
Reservoir of the Sangam amma
System —

The estimate for diverting the
water into the Oydem river, approved
and Govt of India requested to sanction
the same

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

READ—the following paper:—

No. 24 I.

Note by the Chief Engineer for Irrigation.

For many years it has been recognized that the escapes of the Kanigiri reservoir are not sufficiently powerful to keep water level in the tank at a safe level or to lower it in a short space of time in the event of sudden floods. It was originally intended to increase the surplus power by widening the Moldevi drain into which the surplus now passes, but the cost of doing so to a sufficient extent would be very considerable. It has been suggested therefore that additional surplus power can be obtained by connecting the reservoir with the Pyderu river which is in a distinct basin of its own. Estimates for improving the surplus escape to the Moldevi were limited for

2. The plans and estimates for improving the surplus escape to the Moldevi were sanctioned in G.O. No. 689 I., dated 27th August 1895, and those now submitted for sanction under paragraph 35 (v) (b), chapter V, Volume II, Public Works Department Code, are for the necessary works connected with the Pyderu, the nature and scope of which is explained in the report which accompanies the estimate.

3. If funds are made available, the work would probably be completed by 31st March 1899.

(Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

30th Jan. 1896.

ENCLOSURE.

REPORT to accompany the estimates for diverting the surplus of the Kanigiri reservoir into the Pyderu.

According to present arrangements, the surplus of the Kanigiri reservoir is discharged into the Moldevi. This is closely fringed with cultivation, and crosses the northern trunk road, and will cross the embankment of the East Coast Railway now under construction.

2. An estimate has been drawn up for improving the Moldevi and widening it so as to enable it to discharge in four days the maximum drainage from the reservoir and the tract below.

3. As an additional precaution against the breaching of the embankment of the East Coast Railway, which will shortly be constructed, it is proposed to provide an alternative means of surplusing by constructing a weir at the north-east part of the tank and digging a channel through the ridge that separates the valley of the Moldevi from that of the Pyderu.

4. This latter stream is not fringed with cultivation, and is well adapted as a surplus channel, if only a bridge to carry the extra discharge be constructed on the Iskapalle road, the bridge on the Trunk road providing sufficient waterway. Provision to the extent of Rupees 30,000 for a rolled iron girder bridge has been made for this.

5. The outlet of the drain is into a backwater and is not anywhere obstructed. The channel is 2 miles 7 furlongs long and has been designed to carry 3,500 cubic feet a second from its head down to 1 mile and from thence 3,900 cubic feet a second with a depth of 5½ feet and side slopes 1 to 1, the local drainage being provided for by the greater width of the channel in the second reach.

6 and 7. The channel skirts the Turimerla imperial tank which it supplied by means of a sluice in the right bank.

8. In the bund of the tank at 1 mile 7 furlongs from the surplus weir a drop will be built, the crest of which is at the full supply level of the tank. If, therefore, the sluice for the tank be open, no water can be discharged over the crest of the drop until the tank is full. Thus the supply of the tank is secured.

9. After leaving the tank the channel flows for 1 mile when it falls into the Pyderu.

10. The nature of the soil to be excavated was ascertained by trial pits taken down to the proposed bed level, and a longitudinal section showing the different soils met with is appended. The abrupt vertical lines showing the soils in juxta position are due to the pits being dug at stated intervals and of course do not show the actual section; but the section is accurate enough for a reliable estimate being framed of the cost.

11. The channel needs to be embanked on the right towards the Turimerla tank, as the depth over the drop is 5 feet, the crest of the drop being at the F.S.L. of the tank, and for the same reason the bund of the tank to the left (west) of the drop will have to be raised to prevent the drop being turned.

12. In the sketch showing the line taken by the channel, the Yellamanchi tank is shown. This tank which is a shrotriem tank as well as the Pedda Puttedu tank below it could be easily supplied from the Turimerla tank and the delta cess alone from these three tanks (Re. 1 per acre) would amount to about Rs. 1,000, leaving out of question the delta cess and the kist from new lands; but as the work is a drainage work, and it is only when water could be spared after the Sangam and Pennéru deltas and the Nellore tank were satisfied that these tanks could be filled, no credit is taken for any return.

13. It is however probable that in most years the Turimerla and Pedda Puttedu tanks could be filled in the south-west monsoon, and so an early supply given to the crops which at present can only be sown in September and October.

14. The head sluice will consist of 14 vents, each 6 × 5 feet and will be provided with non-rising screws.

15. The sill level will be 86.00 or 13 feet above the sill level of the sluices in the reservoir and at the same level at which it is proposed to surplus the reservoir into the Moldevi, the F.T.L. and M.W.L. of the reservoir being 21.45 feet above the sill level of the sluices (94.45, sill level 73.00).

16. Reference to the sketch annexed will show a further possible development of the scheme as regards supply of water for irrigation. The North Amalur and North Mopur (large and small) and Graddagunta tanks could be supplied by means of a low dam across the Pyderu just above the trunk road. Even if these tanks were filled once in the south-west monsoon, both the ryots and Government would benefit enormously, but as stated before no credit can be taken for such extra extension of cultivation. Direct irrigation of course could not be depended on.

17. To work the shutters of the weir, a staff of three lascars would be necessary. The cost of this establishment would be Rs. 216 a year.

18. The whole cost of the scheme would be as follows:—

	RS.
Works	1,68,900
Establishment at 23 per cent.	38,648
Tools and plant	2,520
Abatement of land revenue	1,000
Total ...	2,11,068
Say ...	2,11,000

The maintenance of the drain and works would cost as below:—

	RS.
Waste weir	200
Establishment	216
Repair of huts	15
Head sluice to Turimerla tank and drop	150
Drain	469
Total ...	1,000

(Signed) C. H. D. MARJORIBANKS,
Executive Engineer.

24th April 1895.

ESTIMATE FORM—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	SANGAM ANICUT SYSTEM.	RS.	RS.	RS.	RS.
	4. Drainage and protective works.				
	Pyderu Scheme.				
	Remunerative work.				
2. Land ..	Compensation for land	866	866		
3. Works ..	Head sluice	10,474			
Do. ..	Drop	8,390			
Do. ..	Head sluice to Turimerla tank	2,220			
	Iron bridge	30,000		51,084	
4. Earthwork ..	Excavating channel	4,16,600			
Do. ..	Repairing bund of Kondayagunta	200		1,16,800	
5. Miscellaneous ..	Demarcation stones	150		150	
				1,68,900	1,68,900
	Total, I Works				1,68,900
	II. Establishment				38,648
	III. Tools and Plant				452
	Total				2,08,000

(Signed) R. A. SRINIVASA AIYANGAR,
Executive Engineer, Nellore Division.

11th June 1895.

ORDER—No. 147 I., dated 10th February 1896.

The estimate amounting to Rs. 2,08,000 for diverting 3,500 cubic feet per second of the surplus water of the Kanigiri reservoir of the Sangam Anicut system into the Pyderu river is approved.

2. Ordered that a copy of these Proceedings be forwarded to the Government of India, with a request that sanction may be accorded to the estimate under "49. Capital expenditure not charged to Revenue," Sangam Anicut System, Open Capital Account.

[Here enter No. 148 I., dated 10th February 1896.]

(True Extract.)

Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, II Circle.
" Examiner, Public Works Accounts.
" Revenue Department.

Exd. C. M. Brisson.
Spare Copies

IRRIGATION.
ACCOUNT.

Gobt. of {1896} Madras.
PUBLIC WORKS.

Dated February, 10th.

Recd.

Encl.

G.O. No. 147 I., 10th Feb. 1896.

FEBRUARY.

Surplus water of the Kanigiri
Reservoir

Approving the estimate of Rs. 2,08,000 for diverting 3,500 cubic feet per second of the — of the Sangam Anicut system into the Pyderu river, and requesting the sanction of the Government of India to the same.

No. 147 I., 10TH FEBRUARY 1896.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following paper:—

No. 24 I.

Note by the Chief Engineer for Irrigation.

For many years it has been recognized that the escapes of the Kanigiri reservoir are not sufficiently powerful to keep water level in the tank at a safe level or to lower it in a short space of time in the event of sudden floods. It was originally intended to increase the surplus power by widening the Moldevi drain into which the surplus now passes, but the cost of doing so to a sufficient extent would be very considerable. It has been suggested therefore that additional surplus power can be obtained by connecting the reservoir with the Pyderu river which is in a distinct basin of its own.

2. The plans and estimates for improving the surplus escape to the Moldevi were sanctioned in G.O. No. 689 I., dated 27th August 1895, and those now submitted for sanction under paragraph 35 (v) (b), chapter V, Volume II, Public Works Department Code, are for the necessary works connected with the Pyderu, the nature and scope of which is explained in the report which accompanies the estimate.

3. If funds are made available, the work would probably be completed by 31st March 1899.

(Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

30th Jan. 1896.

ENCLOSURE.

REPORT to accompany the estimates for diverting the surplus of the Kanigiri reservoir into the Pyderu.

According to present arrangements, the surplus of the Kanigiri reservoir is discharged into the Moldevi. This is closely fringed with cultivation, and crosses the northern trunk road, and will cross the embankment of the East Coast Railway now under construction.

2. An estimate has been drawn up for improving the Moldevi and widening it so as to enable it to discharge in four days the maximum drainage from the reservoir and the tract below.

3. As an additional precaution against the breaching of the embankment of the East Coast Railway, which will shortly be constructed, it is proposed to provide an alternative means of surplusage by constructing a weir at the north-east part of the tank and digging a channel through the ridge that separates the valley of the Moldevi from that of the Pyderu.

4. This latter stream is not fringed with cultivation, and is well adapted as a surplus channel, if only a bridge to carry the extra discharge be constructed on the Iskapalle road, the bridge on the Trunk road providing sufficient waterway. Provision to the extent of Rupees 30,000 for a rolled iron girder bridge has been made for this.

5. The outlet of the drain is into a backwater and is not anywhere obstructed. The channel is 2 miles 7 furlongs long and has been designed to carry 3,500 cubic feet a second from its head down to 1 mile and from thence 3,900 cubic feet a second with a depth of 5½ feet and side slopes 1 to 1, the local drainage being provided for by the greater width of the channel in the second reach.

6 and 7. The channel skirts the Turimerla imperial tank which it supplied by means of a sluice in the right bank.

8. In the bund of the tank at 1 mile 7 furlongs from the surplus weir a drop will be built, the crest of which is at the full supply level of the tank. If, therefore, the sluice for the tank be open, no water can be discharged over the crest of the drop until the tank is full. Thus the supply of the tank is secured.

9. After leaving the tank the channel flows for 1 mile when it falls into the Pyderu.

10. The nature of the soil to be excavated was ascertained by trial pits taken down to the proposed bed level, and a longitudinal section showing the different soils met with is appended. The abrupt vertical lines showing the soils in juxtaposition are due to the pits being dug at stated intervals and of course do not show the actual section; but the section is accurate enough for a reliable estimate being framed of the cost.

11. The channel needs to be embanked on the right towards the Turimerla tank, as the depth over the drop is 5 feet, the crest of the drop being at the F.S.L. of the tank, and for the same reason the bund of the tank to the left (west) of the drop will have to be raised to prevent the drop being turned.

12. In the sketch showing the line taken by the channel, the Yellamanchi tank is shown. This tank which is a shrotriem tank as well as the Pedda Puttedu tank below it could be easily supplied from the Turimerla tank and the delta cess alone from these three tanks (Re. 1 per acre) would amount to about Rs. 1,000, leaving out of question the delta cess and the kist from new lands; but as the work is a drainage work, and it is only when water could be spared after the Sangam and Pennéru deltas and the Nellore tank were satisfied that these tanks could be filled, no credit is taken for any return.

13. It is however probable that in most years the Turimerla and Pedda Puttedu tanks could be filled in the south-west monsoon, and so an early supply given to the crops which at present can only be sown in September and October.

14. The head sluice will consist of 14 vents, each 6 x 5 feet and will be provided with non-rising screws.

15. The sill level will be 86.00 or 13 feet above the sill level of the sluices in the reservoir and at the same level at which it is proposed to surplus the reservoir into the Moldevi, the F.T.L. and M.W.L. of the reservoir being 21.45 feet above the sill level of the sluices (94.45, sill level 73.00).

16. Reference to the sketch annexed will show a further possible development of the scheme as regards supply of water for irrigation. The North Amalur and North Mopur (large and small) and Graddagunta tanks could be supplied by means of a low dam across the Pyderu just above the trunk road. Even if these tanks were filled once in the south-west monsoon, both the ryots and Government would benefit enormously, but as stated before no credit can be taken for such extra extension of cultivation. Direct irrigation of course could not be depended on.

17. To work the shutters of the weir, a staff of three lascars would be necessary. The cost of this establishment would be Rs. 216 a year.

18. The whole cost of the scheme would be as follows:—

	RS.
Works	1,68,900
Establishment at 23 per cent.	38,648
Tools and plant	2,520
Abatement of land revenue	1,000
Total ...	2,11,068
Say ...	2,11,000

The maintenance of the drain and works would cost as below:—

	RS.
Waste weir	200
Establishment	216
Repair of huts	15
Head sluice to Turimerla tank and drop	150
Drain	469
Total ...	1,000

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Executive Engineer.

24th April 1895.

ESTIMATE FORM—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	SANGAM ANICUT SYSTEM.	RS.	RS.	RS.	RS.
	4. Drainage and protective works.				
	Pyderu Scheme.				
	Remunerative work.				
2. Land ..	Compensation for land	866	866		
3. Works ..	Head sluice	10,474			
Do. ..	Drop	8,390			
Do. ..	Head sluice to Turimerla tank	2,220			
	Iron bridge	30,000		51,084	
4. Earthwork ..	Excavating channel	4,16,600			
Do. ..	Repairing bund of Kondayagunta	200		1,16,800	
5. Miscellaneous ..	Demarcation stones	150		150	
				1,68,900	1,68,900
	Total, I Works	..	..	..	1,68,900
	II. Establishment	..	..	..	38,648
	III. Tools and Plant	..	..	..	452
	Total	..	..	..	2,08,000

(Signed) E. A. SRINIVASA AIYANGAR,
Executive Engineer, Nellore Division.

11th June 1895.

ORDER—No. 147 I., dated 10th February 1896.

The estimate amounting to Rs. 2,08,000 for diverting 3,500 cubic feet per second of the surplus water of the Kanigiri reservoir of the Sangam Anicut system into the Pyderu river is approved.

2. Ordered that a copy of these Proceedings be forwarded to the Government of India, with a request that sanction may be accorded to the estimate under "49. Capital expenditure not charged to Revenue," Sangam Anicut System, Open Capital Account.

[Here enter No. 148 I., dated 10th February 1896.]

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, II Circle.
" Examiner, Public Works Accounts.
" Revenue Department.

ENDORSEMENT—No. 148 I., dated 10th February 1896.

Forwarded.

(By order.)

Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

Exd. C. M. Brisson.
Spare Copies

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

Note by the Chief Engineer for
Irrigation

(H.E. NO 24 I dated 30th 22 Jan: /96)

For many years it has been recognized that the escapes of the Kanigiri reservoir are not sufficiently powerful to keep water level in the tank at a safe level or to lower it in a short space of time, in the event of sudden floods. It was originally intended to increase the surplus power by widening the Moldevi Drain into which the surplus now passes but the cost of doing so to a sufficient extent would be very considerable. It has been suggested therefore that additional surplus power can be obtained by connecting the reservoir with the Pyderu river which is in a distinct basin of its own.

2 The plans and estimates for improving the surplus escape to the Moldevi were sanctioned in G.O. NO:689-I dated 27th August 1895 and those now submitted for sanction under para 35V (b) Chapter V, Vol 11, P.W.D. Code are for the necessary works connected with the Pyderu the nature and scope of which is explained in the report which accompanies the estimate

IRRIGATION.
ACCOUNT.

Govt. of {1896} Madras.
PUBLIC WORKS.

Dated February, 10th.

Recd.

Encl.

G.O. Nos. 147, 148 I., 10th Feb.
1896.

FEBRUARY.

Surplus water of the Kanigiri
Reservoir

Forwarding Proceedings requesting sanction to the estimate of Rs. 2,08,000 for diverting 3,500 cubic feet per second of the — of the Sangam Anicut system into the Pyderu river.

estimate.

3 If funds are made available the work would probably be completed by 31st March 1899.

ORDER THEREON

N^o 147 S. of 10th Feb 1896.

The estimate amounting to Rs 2,08,000 for diverting 3500 cubic feet per second of the surplus water of the Kanigiri re-servoir of the Sangam Anicut System into the Pyderu river is approved.

2 Ordered that a copy of these Proceedings be forwarded to the Govt of India with a request that sanction may be accorded to the estimate under "49 Capital expenditure not charged to Rev:" Sangam Anicut System, Open Capital Account

Pueda

30/1

(H.E. NO: *148 S. of 10th Feb 1896.*

Forwarded.

Pueda

30/1

W
4 Feb

W
5/2/96

28
5/2/96

+ 27 envelopes sent to Mr II buli 8/7/96

To,
The Chief Engineer for Irrigation.
+
.. Suptg Engineer, Second Circle.
.. Examiner of P.W. Accounts.
.. Revenue Department.

DESPATCHED

27 FEB. 96

Plan sent to T for custody 2-3-96.

Th
56

To-

H. E. the Governor

The Hon: MR. H. W. Bliss C. I. E.

J. Grose C. I. E.

Ests 30 (10 plans)

Dec: 1. 2. 96

Division of the surplus
Waters of the Kanigiri Reservoir
of the Sangam Irrigation System

7.5.96

WLL

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Issue

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Public Works
Department
II Circle.

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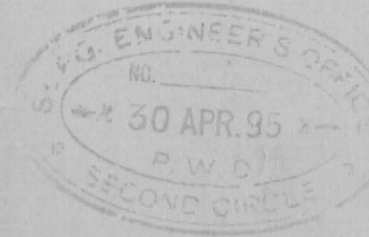
Nellore Division
Nellore District

Report to accompany the estimates
for diverting the surplus of the Kanigiri
Reservoir into the Pyderu.

According to present arrangements the
surplus of the Kanigiri Reservoir is
discharged into the Maldevi. This
is closely fringed with cultivation,
and crosses the Northern Trunk Road,
and will cross the Embankment of
the East Coast Railway now under
construction.

2. An Estimate has been drawn up for
improving the Maldevi and widening it
so as to enable it to discharge in
4 days the maximum drainage from
the Reservoir and the tract below
the ~~Reservoir~~ ^{canal}.

3. As an additional precaution against
the breaching of the Embankment of
the East Coast Railway, which will shortly
be constructed, it is proposed to
provide an alternative means of
surplusage by constructing a weir at
the north east part of the tank,
and



and digging a channel through the ridge that separates the valley of the Maldevi from that of the Pydaru.

4. This latter stream is not fringed with cultivation, and is well adapted as a surplus channel; if ^{an} ~~only~~ bridge to carry the extra discharge be constructed on the Iskappally Road, the bridge on the Trunk Road providing sufficient extra waterway. Provision to the extent of Rs 30,000 for a Rolled Iron Girder Bridge has been made for this.

5. The outlet of the drain is into a back water and is not anywhere obstructed. The channel is 2 miles 7 furlongs long and has been designed to carry 3500 cft a second from its head down to ~~the~~ ^{the} 7 furlongs and from thence 3900 cft a second with a depth of $5\frac{1}{2}$ feet and side slopes 1 to 1, the local drainage being provided for by the greater width of the channel, ^{in the second reach}

6. The channel skirts the Surimerla imperial tank which it supplies by means of a sluice in the Right Bank.

8. In the bund of the tank at 6 miles 7 furlongs from the surplus weir a drop will be built the crest of which is at the full supply level of the tank

380
tank. If, therefore, the sluice for the tank be open no water can be discharged over the crest of the drop until the tank is full, ^{thus} ~~so that~~ the supply of the tank is secured.

9. After leaving the tank the channel flows for 1 mile ^{when} ~~it~~ it falls into the Pydaru.

10. The nature of the soil to be excavated was ascertained by trial pits taken down to the proposed bed level, and a longitudinal section shewing the different soils met with is appended. The abrupt vertical lines shewing the soils in juxtaposition are due to the pits being ^{dug} ~~cut~~ at stated intervals and of course do not shew the actual section; but the section is accurate enough for a reliable estimate being framed after cost.

11. The channel needs to be embanked on the right towards the Surimerla tank as the depth over the drop is 5 feet, the crest of the drop being at the F.S.L. of the tank, and for the same reason the bund of the tank to the left (west) of the drop will have to be raised to prevent the drop being turned.

12 In the sketch shewing the line taken by the channel, the Yellamanchi Tank is shewn. This tank which is a shrotriam tank as well as the Pedda Putthedu tank below it, could be easily supplied from the Turimerla tank and the Delta pass alone from these three tanks (Rs 1 per acre) would amount to about 1000 Rupees leaving out of question the Delta pass, & the Kist from new lands; but as the work is a drainage work, and it is only when water could be spared after the Sangam and Penner Deltas and the Nellore tank were satisfied, that these tanks could be filled no credit is taken for any return.

13. It is however probable that in most years the Turimerla and Pedda Putthedu Tanks could be filled in the S.W. monsoon and so an early supply given to the crops which at present can only be sown in September and October.

14. The Weir will consist of ~~Rocks~~ ^{7 Fm's} ~~each~~ ^{each} 6 ft wide and will be provided with

430
with non rising screws.

15. The Sill level will be 86.00 or 13 feet above the sill level of the sluices in the Reservoir and at the same level at which it is proposed to surplus the Reservoir into the Maldeni, the F.T.I. and M.W.L. of the Reservoir being 21.45 feet above the sill level of the sluices (94.45, sill level 73.00)

16 Reference to the sketch annexed, will shew a farther possible development of the scheme as regards supply of water for irrigation. The North Amalur and North Hooper (large and small) and Graddagunta tanks could be supplied by means of a low dam across the Pydennu, just above the Trunk Road. Even if these tanks were filled once in the S.W. monsoon, both the ryots and Government would benefit enormously but as stated before no credit can be taken for such extra extension of cultivation. Direct irrigation of course could not be depended on.

17 To work the shutters of the weir, a staff of 3 lascars would be necessary. The cost of this establishment would be Rs 216/- a year.

18 The whole cost of the scheme would be as follows:—

Worers	1,68,900
	<u>1,73,000</u>
Establishment at 23 per cent	38,648
	<u>39,790</u>
Tools and Plant	2,520
	<u>2,610</u>
Abatement of Land Revenue.	1,000

2,16,400

2,11,068

2,11,000

The maintenance of the drain and works would cost as below:—

Waste Weir . . .	200
Establishment . . .	216
Repair of huts . .	15
Head Sluice to Turimerla tank and drop .	150

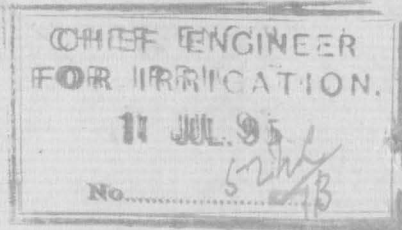
Drain . . . 469

1000

A. S. Marjoribanks

Ence Engr

24.4.95



Diverting the Surplus of the
Kamifis Reservoir into the
Oydem.

Report. to accompany
the return for the

Order
1026786

Santh ESTIMATE FORM—ABSTRACT—CLASSIFIED.

Sub-head.	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distribu- tary.	Total of each Main head	REMARKS.
1	2	3	4	5	6	7
	<i>Tangam Amsait System</i> ~~<i>Santh</i>~~ ~~<i>Santh</i>~~ ~~<i>Santh</i>~~					
	<i>4 Drainage and Protective works</i> <i>Modern Scheme</i> <i>Reparative work</i>	866				
2 Land	Compensation for land	900	866	900		
3 works	Head Sluice	10,474				
do	Drop	8,390				
do	Head sluice to Turimerla	2,210				
	Tank	2,200				
	Iron Bridge	30,000				
			51,084	50,480		
4 Earthwork	Excavating channel	4,16,600				
do	Repairing bund of Kon- dayagunta	200				
			116,800	116,870		
5 Miscellaneous	Demarcation stones	150				
			150	168,900	168,000	
				168,900	168,000	
	<i>Estimate II works</i>			168,900		
	<i>Establishment</i>			38,648		
	<i>McBaudary</i> <i>The Tools & Plant</i>			452		
	<i>Major & Minor Works</i>			20,800		
	<i>Supr. Engineer</i> <i>The Civil</i>					

STATION Ex. Engrs office, Bellare

Dated 11 June 1895.

P. A. Srinivasan
10-45
Executive Engineer,
Nellore Division

Second CIRCLE.

CHIEF ENGINEER
FOR IRRIGATION.
11 JUL. 95

DIVISION—

Nellore

DISTRICT—

Nellore

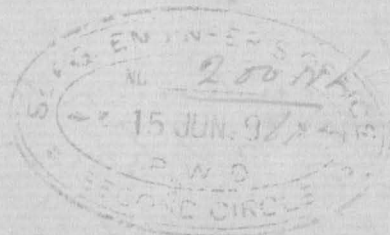
ESTIMATE FORM—ABSTRACT—CLASSIFIED.

To accompany the Detailed Estimate No.]

of 188 -8 for *

Pyderu Scheme.

* Here enter the Name and Description of work in full.



*Rs 4.3
1006/86*

Superintending Engineer,

No. 264 N.L.

II CIRCLE,

Dated 9th July 1

From,

Majr W. L. C. Baddley Esquire, D.C.

Superintending Engineer,

II Cir

To,

*The Chief Engineer,
For Irrigation
Madras.*

Encs: 24.

- 1 Sketch map of the Pyderu Scheme
- 1 Survey plan of proposed Channel
- 3 Sheets Longt. & Cross sections
- 1 Sheet of Diagram
- 1 Plan of H₂O sluice - Kamigiri Reservoir
- 1 - do - of Surimela tank
- 1 Plan of drop for proposed Channel.
- 1 Plan of site for proposed for ward plans and estimate
- 8 Detail & abstr. - Encls.
- 1 General abstract
- 1 Classified - do -
- 1 Report
- 2 Data Sheets
- 1 Sheet of Hydraulic calculations

24

*Plans & machinery
to sent in a separate
Cover packet.*

*In continuation of the
Office No. 263 & B. I have the honor
to forward plans and estimate
amounting to Rs 168,900 for the work
necessary to divert 3500 Cft. per second
of the surplus water of the Kamigiri
Reservoir into the Pyderu River.
2. The project will eventually
be remunerative for there are
several tanks which could
be supplied by the surplus Channel
before it reaches the river.
It would, however, be of little
use to draw up statements of
the*

land that could be irrigated
 des these tanks until the
 ole agent of the Sangam
 Encl^{ment} System 94,000 acres,
 1. Tracts been brought under cultivation.
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The strongest argument in
 favour of the Scheme is that it
 will give such complete command
 over the Kaniyari Reservoir,
 (provided the masonry dam
 is improved & the Maldeni drain
 widened) that it will be possible
 to store more water and thereby
 ensure the safety of the crops
 under the Sangam Ament-System.

Full details regarding the
 scheme are given in the report
 which accompanies the plans
 & estimates.

I have the honor to be,
 Sir,

Your most obt. Servant,
Hubert B. B. B. Major R.E.
 Supd. Engrs. II (Genl.)

From

CHIEF ENGINEER
FOR IRRIGATION.
1 JUL 95
No. 5222

The Suptg Engineer
Madras.

To

The Chief Engineer
For Irrigation
Madras.

N^o 264 N.A.

Dated 9th June 95.
Encls: 24

By dam Schemes —
Plans and estimation
Connection with
Forwards — with remarks

Recd
1026/36
4472
168

From,

The Superintending Engineer,

II Circle.

To,

The

Dated

Received

} 18

Enclosures.

NO.

SUBJECT.