

(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.	2047	Press
B.P. No.		Mis.
272-273		
Dated	16 8	1873

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
16th August 1873.*

No. 272. Read the following papers:—

No. 451-B.

Note by the Chief Engineer for Irrigation.

THE work provided for in the estimate, amounting to Rupees 1,000, submitted by the District Engineer, South Arcot, for confining the Pooniar to its proper bed, has formed the subject of the correspondence as per margin between this office and the late Superintending Engineer, 5th Division. The objections

which were rightly made by Major Oakes, in the first instance, to this work upon the evidence obtained from the sketch have been met, and the embankment may be constructed, as proposed, with however the following modifications:—

1st.—The top width of the bank can be reduced to 6 feet. The average height of the bank is 4.30 feet and its length 1,525 feet, so that the reduction in quantity will be—

$1,525 \times 3 \times 4.3 = 19,672\frac{1}{2}$ cubic feet = 728 cubic yards, rs.

and this at 1 anna a cubic yard ... 45½

2nd.—The Casuarina plants may be omitted ... 60

And the charge for the up-keep of the plantation ... 144

249½

10½

Sundries ... 260

3rd.—The whole of the triangular space between the embankment and the Pooniar should be planted up with nanul grass, beginning at the upper or west corner, and hirnochya, a sort of willow, can be planted in lines a few yards apart, parallel to the stream of the Pooniar. These items will cost between 400 and 500 Rupees.

4th.—The Pooniar channel opposite Veeramadoo appears to require improvement by the removal of the projecting corner on the right bank, and, similarly, on the left bank, a little higher up there seems to be a small projection which must act as a groyne, and which should be cut away. An allowance of Rupees 200 may be made on these accounts:

2. The estimate will then stand thus:—

	rs.
Amount as submitted	1,000
Add modifications as above, Nos. 3 and 4	700
	1,700
Deduct modifications, Nos. 1 and 2	260
Total	1,440

3. The work should be completed within the current official year, the nanul planting being proceeded with so soon as the ground is in a condition favourable to its taking root at once, when no establishment will be required for its up-keep.

Ootacamund, (Signed) J. MULLINS, Lieut.-Colonel, R.E.,
26th July 1873. Chief Engineer for Irrigation.

*Proceedings of the Madras Government, Public Works Department,
16th August 1873.*

From R. E. NORFOLK, Esq., Officiating District Engineer, South Arcot, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Cuddalore, 16th July 1873, No. 66.

I HAVE the honour to re-submit, for your approval and sanction of Government, a revised estimate for constructing an embankment from the south bank of the Pooniar near Mayoor village to join the north bank of the Mullataur channel, which has been now prepared in accordance with the suggestions offered in your office No. 283, of the 20th November last, to the late Superintending Engineer, 5th Division.

1 Sketch Plan.
1 Section.
1 Estimate.
1 Specification.

2. The estimate has been reduced from Rupees 2,350 to Rupees 1,000. I have visited the site, and consider the estimate provides for all that is necessary.
3. Early sanction is solicited in order that the work may be taken in hand at once and completed in time to settle down before the north-east monsoon sets in.

From Colonel E. A. FOORD, R.E., Superintending Engineer, 5th Division, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Cuddalore, 29th October 1872, No. 169.

I HAVE the honour to forward, for the sanction of Government, an estimate of Rupees 2,350 for an embankment across the head of the old course of the Mullataur. The object of the work is to confine the Pooniar to its present course, and prevent water passing in high floods from the Pooniar into the Mullataur.

1 Sketch Plan.
1 Section.
1 Estimate.
1 Specification.

2. The present head of the Mullataur is at the Pooniar Anicut. The river crosses the Trichinopoly road at Arasoor, thence taking a south-easterly course, it falls into the Guddelum. But at some former period, as the old maps show, its course from Arasoor was to the Pooniar, which it joined a few miles east of the Coombaconum road.
3. The Mullataur has not shown any tendency of late years to flow in its old bed, and very little water has passed from the Pooniar into the Mullataur in time of floods. Attention has recently been drawn to the possibility of the Mullataur taking its old course, or to its receiving a large quantity of water from the Pooniar in consequence of a bridge having been built across the Mullataur between Punrooty and Oolundoorpet, and a railway to Cuddalore having been sanctioned.
4. For the security of these works, the embankment is now proposed to be constructed.

From Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, to Colonel E. A. FOORD, R.E., Superintending Engineer, 5th Division, dated Fort St. George, 1st November 1872, No. 245.

With reference to your letter No. 169, dated 29th October, and its enclosures, * I have the honour to request that you will be good enough to report whether the Pooniar river, between the point from which the Mullataur and Coriyaur rivers branch and that at which they again unite, has sufficient capacity to carry the water which now, during high floods, could pass down the three streams. The Pooniar appears to be very narrow near Veeramadoo.

* Four, returned.

2. The present ordinary and maximum high water marks should be shown on the section, and also the anticipated high water mark when all the water is to be passed down the Pooniar river.
3. The cross section of the river bed does not appear to have been taken at the spot shown in the plan, as the site of the embankment for the latter in the section appears to terminate on the Mullataur channel bank, while from the plan it terminates about 100 feet from the channel bank.
4. A depth of 3 feet is allowed for the puddle wall; this wall should, if possible, be carried to the hard bed of the river below the sand, and if this is more than 6 feet below the existing bed the

*Proceedings of the Madras Government, Public Works Department,
16th August 1873.*

puddle wall should be carried at least 6 feet under the deepest part of the bed, and its bottom should be on one level; hence considerable excavation would have to be made in the higher parts of the river bed to admit of the puddle wall being put in. In the specification the puddle is said to be 6 feet at bottom, in the plan and estimate it is 3 feet. The estimate provides earth for the embankment; the specification shows it is to be formed of sand; the rate would appear to favour the latter, but, if so, a facing of earth at least two yards thick should be provided for the front slope of the bank, and the section given to the bank might be reduced.

5. As regards the formation of deposit in front of the bank its position is anything but advantageous. If the ground between the Coriyaur and Mullataur is high and above the highest flood level, it is probable that banks placed, as indicated by the pencil lines, would be more advantageous than that at the site selected; the beds above the banks would soon silt up and form a high padugay, while, at the more eastern spots, the bed would probably be shallower than at the point at which it has been proposed to place the single embankment. If the fall of the river beds is considerable it would of course be desirable to place the banks as far west as possible.

6. Nanul should be planted in rear of the bank as well as in front to prevent the bank from slipping, and durbah rollers, six yards in diameter, well staked down, should form a footing for the nanul facing to start from.

From Colonel E. A. FOORD, R.E., Superintending Engineer, 5th Division, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Punrooty, 13th November 1872, No. 180.

With reference to your letter of the 1st November, No. 245, I have the honour to inform you that I went on the 8th to the site of the proposed embankment, at the head of the Mullataur and Coriyaur, and am of opinion that it will not be advisable to increase the amount of the estimate of Rupees 2,350.

2. The survey which accompanied the estimate is a copy of a portion of that prepared to illustrate the Pooniar Anicut project. From the way the Mullataur and Coriyaur are represented in it, it might be inferred that they were large rivers, but in reality very little water passes down them. The Overseer took some levels in my presence, and these showed that the lowest part of the ground, across which the embankment is to be placed, is 6 feet above the water at present in the river. A rise of 6 feet is a good fresh in the Pooniar, and the water would then only come to the foot of the embankment. So that only in extraordinarily high freshes would there be a foot or two of water at the embankment.

3. The distance from the embankment to the margin of the Pooniar will be 150 yards, which will give sufficient space for silting. The distance from the high ground on the south bank of the Pooniar to the Mullataur channel bank is correctly given in the estimate. I have had a revised estimate prepared in accordance with the suggestions contained in your letter, and it amounts to Rupees 3,840, but I consider the bank as at first proposed to be constructed will be quite strong enough for its intended purpose.

4. The bank extending from the north abutment of the Pooniar Anicut to a distance of 1,200 feet across, a branch of the river was formed ten years ago entirely with sand, planted with nanul, and it has stood very well. The ground in front of it is being brought under cultivation.

5. Under these circumstances, I request you will inform me whether you still wish the estimate to be revised. The survey has been corrected.

From Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, to Colonel E. A. FOORD, R.E., Superintending Engineer, 5th Division, dated Fort St. George, 20th November 1872, No. 283.

Under the circumstances stated in paragraph 2 of your letter No. 180, dated 13th instant, I have the honour to observe that the original estimate of Rupees 2,350 for the proposed embankment across the Mullataur and Coriyaur heads would appear to be unnecessarily high. If the heads of those rivers have silted up 6 feet, and this is the ordinary level of H. W., a puddle wall 3

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16th August 1873.

feet into this silt would appear to be useless, and the foot of the bank proposed would be sufficiently protected by means of a durbah roller 6 yards in diameter embedded in the silt, the silt in front or above the dam being well planted with nanul.

2. In the absence of the section of the bank, I am unable to call to mind its height, but if the water in maximum floods rises only 2 feet above the padugay, a bank 6½ feet high would appear to be ample, while the cross section might perhaps be reduced.

No. 273. ORDER THEREON, 16th August 1873, No. 2,049.

IRRIGATION, No. 17.

On the recommendation of the Chief Engineer for Irrigation, the revised estimate, amounting to Rupees 1,440, as explained in his note, for an embankment and other works to shut out Pooniar water from the Mullataur and Coriyaur rivers in South Arcot, is sanctioned, subject to the Collector's countersignature to the estimate, which, it is observed, should have been obtained in the first instance, and the amount is placed at the District Engineer's disposal from the Reserve under Agricultural.

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

To the District Engineer, South Arcot.
,, Officiating Controller of Public Works Accounts.
,, Chief Engineer for Irrigation.

Exd. S. T. Austin.

Spare Copies.

No. 454B. *Note by the Chief Engineer for Irrigation.*

The work provided for in the estimate, amounting to Rupees 1,000, submitted by the District Engineer South Arcot for confining the Pooniar to its proper bed, has formed the subject of the correspondence as per

From S.C. 29th Oct 1872 No. 169 margin, between this office and the late District Engineer
To " 1st Nov. " No. 245
From " 13th do " " No. 180
To " 20th do " " No. 283 permuting Engineer

5th Division. The objections which were rightly made by Major Baker in the first instance to this work upon the evidence obtained from the sketch have been met, and the embankment may be constructed as proposed with however the following modifications.

1st the top width of the bank can be reduced to 6 feet. The average height of the bank is 4.30 feet & its length 1525 feet so that the reduction in quantity will be

$$1525 \times 3 \times 4.3 = 19672 \frac{1}{2} \text{ Cft} = 728 \text{ Cubic yards}$$

and this at 1 anna a cubic yard = Rupees $45\frac{1}{2}$

2nd the Casuarina plants may be
omitted " 60

and the charge for the upkeep
of the plantation " 144

Sundries $249\frac{1}{2}$
10 $\frac{1}{2}$
260

3rd the whole of the triangular space
between the embankment and the
Pooniar should be planted up with
mangrove, beginning at the
upper or West corner, and here-
after, a sort of willow, can be plant-
ed in lines a few yards apart
parallel to the stream of the
Pooniar. These items will cost be-
tween 400 & 500 Rupees.

4th The Pooniar channel opposite the
rainadoo appears to require im-
provement by the removal of the
projecting corner on the right bank,
similarly on the left bank
a little higher up there seems
to be a small projection which
must act as a groyne & which
should be cut away. An allowance
of Rupees 200 may be made on
them

these accounts.

2. The estimate will then stand
thus

Amount as submitted Rupees 1000

Add modifications as
above No 3 & 4 700

Deduct modifications No 2 1700
260

Rupees 1440

3. The work should be completed
within the current official year,
the mangrove planting being pro-
ceeded with as soon as the ground
is in a condition favorable
to its taking root at once,
when no establishment will
be required for its upkeep.

Atacamund W. H. H. S. H. H.
26 July 1873.

Chief Eng. for Irrigation

To The Secretary to Govt. P. W. D.

No 66

3
Dis. Engrs Office T. Arcot.
Dated 16th July 1873.

From,
The Off. Dist. Engineer.
South Arcot.

To, The Chief Engineer for
Irrigation

Sir,
I have the honor to resubmit for your approval and sanction of Government a revised Estimate for constructing an Embankment from the South bank of the P. river near Mayoon village to join the North bank of the Mullatur Channel, which has been now prepared in accordance with the suggestions offered in your Office No 283 of the 20th November last to the late Superintending Engineer 5th Division.

2. The Estimate has been reduced from Rupees 2350 to Rupees 1000. I have visited the site and consider the Estimate provides for

Enclosures 4
1 Sketch plan
1 Section
1 Estimate
1 Specification

Mr. 1873 10/11/73
Approved by Mr. 1873 10/11/73

From
The Chief Engineer for
Irrigation

26 July 1873
10/11/73

10/11/73

10/11/73

10/11/73

10/11/73

10/11/73

10/11/73

10/11/73

for all that is necessary.

3. Early sanction is solicited in order that the work may be taken in hand at once and completed in time to settle down before the A. E. Monsoon sets in.

I have the honor to be Sir

Your Most Obedt. Servant
O. W. R.
Mg. Dist. Engineer

N. 169

Sup. Engrs Office, 5th Division
Cuddalore, 29 October 1922

From

The Superintending Engineer,
5th Division

To

The Chief Engineer
for Irrigation

Sir,

Enclosures 4.
1. Sketch Plan for the sanction of Government, and
1. Section.
1. Estimate.
1. Specification.
I have the honor to forward, in enclosure of Rs. 2350/- for construction across the head of the old course of the Mullatar. The object of the work is to confine the Ponnar to its present course and prevent water passing in high floods from the Ponnar into the Mullatar.
2. The present head of the Mullatar is at the Ponnar Anicut. The river crosses the Trichinopoly road at Kasoor, thence taking a South Easterly course, it falls into the Guddilum. But at some former period, as the old maps show, its course from Arasoor was to the Ponnar which it joined a few miles East of the Coombaconam road.

3. The

3. The Mullatar has not shown any tendency of late years to flow in its old bed and very little water has passed from the Poomiar into the Mullatar in time of floods. Attention has recently been drawn to the possibility of the Mullatar taking its old course, or to its receiving a large quantity of water from the Poomiar in consequence of a bridge having been built across the Mullatar between Immooty and Colundonpett, and a Railway to be laid along having been sanctioned.

For the security of these works the embankment is now proposed to be constructed

I have the honor to be,
Sir,

Your most Obedt Servant.

EA and Col RB.
Supt. Engineer, Sth Division.

3.

only to
old bed
from
time
been
- later
- coming
the
h

To the Supr. Engrs
5 Dec 1872
1st Nov 1872

CRP-704
From
The Supr. Engineer,
5th Div.

To The Chief Engineer
for Irrigation.

Dated 29th October 1873
Recd: 3/3

Encl. No. 169

Forwarding for the con-
sideration of Government, an Es-
timate of Rs. 2350 for an
embankment across the head
of the old course of the Kul,
later for the security of the
Bridge built across the
river between Panroot &
Aolundapath.

C 77.1327/73

Encl. returned with CRP-704
N 265- 1st November 1872

1. sketch showing the position of the
proposed embankment in the
limits of Mayon village to pre-
vent the floods from the Pu-
near river entering the Malatani
channel.
1. Longitudinal & cross sections of
embankment proposed to be
raised from the South Bank of the
Panniar near Mayon village to
join the North Bank of the Malatani
channel to prevent the floods from
the former falling into the latter.
1. Estimate. Detailed & Abstract
for Rs 2350
1. Specification.

4.

245

15th Aug 1892

Letter No 169 dated 29 Oct 89

At Col. Forth R.R.

Sup. Eng. 5-10

Sir

With reference to your
Letter No 169 dated 29 Oct 89
+ enclosures I have the honor
to request that you will be
good enough to report whether
the proposed river between
the point from which the
main line of the river
branch is that it shall be
again with sufficient
capacity to carry the water which
will, during high floods
could pass down the stream
The proposed appears to
be very narrow near
the present ordinary
of navigation H.W. water
should be shown on the

Section & also the anticipated
H W mark show all the water
is to be poured down the
Burmah River.

3 The cross section of the
River bed does not appear
to have been taken at the spot
shown in the Plan as the S.W.
of the embankment for the
latter in the Section appears
to terminate on the Dacotian
channel bank side from
the plan it terminates about
60 feet from the channel bank

4 A depth of 3' is allowed for
the puddle wall. that wall
should if possible be carried
to the head bed of the river before
the sand & if this is ~~not~~^{impossible}
just below the existing bed
the puddle wall should be
carried at least 6 feet under

40 9
deepest part of the
the bed & the bottom should be an
unlevel, hence considerable exca-
vation would have to be made in
the higher parts of the river bed
to adjust the top of the puddle
in the ~~vicinity~~^{vicinity} of the puddle
as said to be at bottom in the
Plan & estimates it is 5'. The
Estimate provides earth for the
embankment the specification
shows it is to be provided for
the rate would appear to favor
the latter, but it is a question of
earth at least 290000 cubic
feet should be provided for the
point slope of the bank to reduce
the position of the puddle
5 As regards the position of the bank
of deposit or point of the bank
the position is any of the
but a diurnal layer of the
ground between the Cokiam
Dacotian is high & above
the highest flood level, it is
probable that banks placed

as indicated by the pen-
lines could be more advan-
tageous than that at this
selected, the beds along the
banks would soon fill up &
a high padang. But the
the more ~~depth~~ ^{depth} spots
the bed would probably be
shallower than at the point
at which it has been proposed
& place the bridge embank-
ment. If the fall of the
beds is considerable it may
be necessary to derivate the
banks as far west as
possible.

6. Canal should be planted
near of the bank as well as
in front of present the bank
slipping & Durban rollers of
in diameter well stacked &
should form a fortification for the
canal facing the east front.

Paper connected
No. 702. 5-8th 1842 29 Oct 72

water passes down

From S. Laps 529
Rm 767- 188- 13 Nov 1872

N. 245
The Supt Engr
5 Dec

Dated 17th Nov 72
Despatch 248

Encl. 4

P. W. 4327/73
G.O. 2067/73

Return plan
& for an embank-
ment across the
head of the old
course of the Mal-
lata ^{canal} for further
information.

N. 180.

Suptg. Engr. Office, 5th D.
Pun 1007, 13th November 1872.

From
The Superintending Engineer,
5th Division.

To
The Chief Engineer
for Irrigation.

Sir,
With reference to your letter of the
1st November No. 245, I have the honor to
inform you that I went on the 8th to the
site of the proposed embankment at the head
of the Mallata, and Corjar, and am of
opinion, that it will not be advisable to increase
the amount of the Estimate of Rupees 2350.

2. The survey which accompanied the
Estimate is a copy of a portion of that prepared
to illustrate the Lomax Ancient project.
From the way the Mallata and Corjar are
represented in it, it might be inferred that they
were large rivers, but in reality very little
water passes down them. The Overseer

took some levels in my presence, and these showed, that the lowest part of the ground across which the embankment is to be placed is 6 feet above the water at present in the river. A rise of 6 feet is a good fresh in the Poona, and the water would then only come to the foot of the embankment. So that only in extraordinarily high freshes would there be a foot or two of water at the embankment.

3 The distance from the embankment to the margin of the Poona will be 150 yards which will give sufficient space for sitting. The distance from the high ground on the South bank of the Poona to the Mullatar Channel bank is correctly given in the estimate. I have had a revised estimate prepared in accordance with the suggestions contained in your letter, and it amounts to Rupees 3840, but I consider the bank as at first proposed to be constructed will be quite strong enough for its intended purpose.

4 The bank extending from the

North abutment of the Poona Canal to a distance of 1200 feet across a branch of the river was formed two years ago entirely with sand planted with bamboo, and it has stood very well. The ground in front of it is being brought under cultivation.

5 Under these circumstances I request you will inform me whether you still wish the Estimate to be revised. The Survey has been corrected.

I have the honor to be

Sir,

Your Most Obedt. Servant,

E A Moulton R.E.

Suptg. Engineer S^d Division

South West District. S. 1 Range. Trinchera Valley
Irrigation New Mexico.

Revised Estimate. No. of 1873-74.
Work Constructing an embankment from the South
 bank of Pooniar near Mayoor Village to join the North bank of
 the Mullataur Channel to prevent the water from the former
 falling into the latter.

Particulars of Work Measurement
No. 2 B H. Contable

From South bank of River.			
Raising Indian Runnel	1	725.92	5-60 365.40--
Do	1	500	9--2-55 20.520--
Do	2	725	11-20 2-50 45.472--
Do	2	500	5-70 1-42 12.950--40

Total C. ft. of Earthwork	115482.40
or Cubic Yards	42777 $\frac{1}{2}$

or Cubic Yards	42117
Amount to front and rear slopes and top of embankment	725 35
do	28375
do	1500 21
do	16500

Total Sq. feet of Annual Investment	42175
or Square Yards	4686

Barbadoes	1	1	or Square Yards	4686
Silt in	1	1	to be embedded in the	
Silt in	1	1	1500 3	4,500

Total Sq ^{re} feet of Kurbak Rollers	4,500
or Square Yards	500

Sajo's Letter No. 283-
dated 20 Nov-72

1877
 The Safety Deposit
 Co.

To Mr. Chief Engineer
The Admiralty
for Singapore

Sept. 13th November 1892
 Dec. 18th . . .

2010-06-09

Stating that should not be desirable to increase the amount of the Estimate of the 1850 for the proposed maintenance at the head of the Atlantic and Oregon.

1827/73

Abstract

Quantity

Items

Rate Per Amount Total

4277/4	Cubic Yds of Earth work for the Subankment	1	Cy 267 51
5186	Square Yds of Barbed Iron rollers for revetment and to the foot of the Subankment in the front	1	Sy 486 3
	Casuarina and Laurel plantation to the Subankment		
	1760 Casuarina plants		60
	Charge for the up keep of the plantation for 12 months		14 1/2
	Inspector and Superintendence		947 81
			12 7 1/2

Total Estimated Rupees 1000

No. 1 Range Office South West
Camp Holanagar, 23 April 1878
Signed G. C. Wiffen
Dist. Engineer
No. 1 Range, S. West.

Clear for
Offg. Dist. Engineer

Specification to accompany the estimate for throwing up a bund across the beds of the Mula, Latur and Goryana Rivers in the limits of the village of Mayoor.

Amount of Estimate Rupees 1000

The work is to be constructed for keeping the flood water of the Poniar from overflowing the channel limits of the Mulataur channel.

When commencing work a trench 3 feet deep and 3 feet in width to be first excavated, this trench should run parallel with the toe of interior slope, then rollers of iron plates should be made up in lengths of 15 feet by 3 feet along side of this trench and well bound with bar ropes, when a length is completed it should be rolled into the trench and then the sections put up as per the sections in plan, the whole of the earth required for the Subankment is to be taken from the front or river side a distance of not less than 30 yards the pits are only to be excavated 2 yards in depth, one tamper to every 10 feet to be possible when putting up the bund, the whole to be properly sectioned, after the work is completed Casuarina plants to be planted one row at toe of slope and the other on the slope of the Subankment as shown in the sections, they are to be well pinned round and kept watered for 12 months, the whole of the front of the Subankment is to be planted with manul.

Offg. Dist. Engineer
South West

Signed G. C. Wiffen
Dist. Engineer
No. 1 Range, S. West.

N^o 2059/P.D. 15

Proc. of the Madras Govt.

Read the following:

From the Chief Engineer
Engg^{rs} H.E. 8/26 July/73 Re

On the recommen-
dation of the Chief
Engineer for Irrigation,
the revised estimate,
amounting to Rupees
1440, as explained
in his note, for an
embankment & other
works to shut out
Ponnai water from
the Malatani &
Coriyani rivers in
South Arcot, is sanc-
tioned, subject to
the Collector's counter-
signature to the
estimate.

S. H.

1774/30/73.
C. E.
2/11/73.
Specifications to accompany
estimate for constructing an
embankment from the
bank of the river near
Chennai village in the
North Arcot of the Malatani
Channel to prevent the water
from the former falling into
the latter.
Amount of Estimate Rs. 1440.

estimate which it
is observed, should
have been obtained
in the first instance
and the amount is
placed at the Dis-
trict Engineer's dis-
posal from the
Reserve under Agri-
cultural.

by 28/7/73.

Wm

35-

4

The Dist Engr. South India
- Controller of P. W. Works
- Chf Engr. for Irrigation
S. C. D. 11/9/73

N: 272-73

24 Oct 73

CP 4327
Govt. of 1873 Madras.

PUBLIC WORKS.

to The District Engineer
Suttelmar

Dated

Recd.

Encl. 5

G. O. 16 Aug 1873, No. 2049

Nos. 7711/73

Embarkment. Revised

estimate for an embank-
ment to prevent the floods
from Poovar entering the
Mallabair Channel,
mentioned.