(1) பக்கங்களின் எண்ணிக்கை ௨௨.

(2) புதுக்கித் திருப்பிய நாள் 28-10.88

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

பொதுப்பணித் துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	3226	அச்சகம் பலவகை
நாள் :	7-12-1886 ~~198~~.	

௨௮.

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

ஆவண. கா-1—18,000—15-6-87.

7TH DECEMBER 1886, No. 3226 W., PUBLIC WORKS.

3226/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

No. 400 M.D.

REPORT by the Superintendent of Works, in charge of VI Circle, on the revised estimate, amounting to Rs. 90,507, for completing the road from Cumbum to foot of Gúdalúr-Peermaad ghât, in Madura district.

The original estimate, amounting to Rs. 72,148, was sanctioned in G.O., No. 153 W., dated 18th January 1882, and the work was ordered to be carried out by the Local Fund Board. The collection of materials was then in the hands of this department, and in giving over the work to the Local Fund department, a discrepancy in the materials at site was discovered. This was finally disposed of in G.O., No. 2182 W., dated 4th September 1884. In March 1883 some of the rates allowed in the original estimate were found to be insufficient and a revised estimate, amounting to Rs. 73,748, was submitted by the Local Fund Engineer to this office and sanctioned in G.O., No. 1005 W., dated 2nd April 1883. Provision for a proper establishment was not made in that estimate, so a supplemental estimate, amounting to Rs. 3,200, for an establishment, was therefore submitted for sanction with this office letter, dated 28th August 1885, No. 302 M.D., which was sanctioned in G.O., No. 2250 W., dated 28th September 1885, making total amount of revised estimate Rs. 76,948.

2. On the representation of the Superintending Engineer, Tank Maintenance Scheme, the Government in their order, No. 3 W., dated 4th January 1886, directed this department to take charge of the work. As soon as the work was taken over, it was found that the balance of the estimate was not sufficient to complete the works remaining to be done, and the designs for the remaining three bridges also needed revision; hence the necessity for the revised estimate now submitted for sanction.

This estimate is composed of the following items:—

	RS.
(1) Outlay by Local Fund department	46,739
(2) Materials at site	6,382
(3) Works still to be completed	43,768
Total ...	90,507

The works provided in (3) are as follows:—

(a) Repairing culverts and road dams.
(b) Improving the road once completed but now much deteriorated, and for re-gravelling where necessary.
(c) Completing bridges over Surungan and Kakanodai nullahs.
(d) Constructing a bridge over Kuruvanuthu river.

3. The foundations for bridge over Surungan nullah have already been built, but the present estimate provides for adding a counterforts for each abutment. The original design provided for a semielliptical arch, but the late Superintending Engineer, after personal inspection of the site, directed that a segmental arch should be provided;

accordingly the design now forwarded provides for an arch of this kind. Regarding bridge over Kakanodai, the original design provided for one arch of 30 feet and two of 20 feet span. The late Superintending Engineer, after personal inspection of site, decided (*vide* his notes of inspections for 17th April 1886) that one arch of 20 feet span would answer. As, however, the foundations are already laid up to ground level, the estimate now forwarded provides for one arch of 28 feet span. With regard to design for bridge over Kuruvanuthu river, the original design provided for five arches of 40 feet span each, but the late Superintending Engineer decided, after personal inspection, that a bridge consisting of three segmental arches of 40 feet span each would be large enough. Accordingly the estimate provides for a bridge of this size.

4. The rates are fair taking into consideration the unhealthy character of the climate in the Cumbum valley, and the estimate is recommended for sanction.

13th November 1886.

(Signed) J. W. MARTIN,
Supt. of Works, in charge VI Circle.

ORDER—dated 7th December 1886, No. 3226 W., Public Works.

The revised estimate, amounting to Rs. 90,507, for completing the road from Cumbum to the foot of the Gúdalúr-Peermaad ghât, is sanctioned in supersession of the estimate for Rs. 76,948 sanctioned in G.O., No. 2250 W., dated 28th September 1885.

2. The expenditure on the work to the end of 1885-86 amounted to Rs. 46,375, and the grant for the current official year is Rs. 12,285. If possible, a sum of Rs. 20,000 will be provided in the budget for 1887-88 for its execution.

3. This sanction has been registered as Provincial, No. 143 W. of 1886-87, and classified as Communications, Original Works.

(True Extract.)

Captain, R.E.,
Under Secy. to Govt., P. W. D.

To the Superintending Engineer, VI Circle, with ten enclosures.
" Examiner, Public Works Accounts, with the duplicate general abstract estimate.
" Financial Department.

Exd. P. L. Pereira.
Spare Copies

3226/2

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1886 Madras.

PUBLIC WORKS.

Dated December, 7th.

Recd. *Encl.*

G.O., 7th Dec. 1886, No. 3226 W.

DECEMBER.

Road from Cumbum to the foot of the Gudalur-Peermaad Ghat

Revised Estimate of Rs. 90,507 for completing t —, sanctioned.

No. 400. W. D.
13-11-86

D/152

Enclo: 7.

1. Revised Est:
1. Abstract.
1. Gl Comparative statement.
4. Tracings.

7.

Report by Supdt of works, in charge of VI circle, on the Revised Estimate amounting to Rs 90,507 for completing the Road from Cumbum to foot of Gudalur-Peermad Ghaut, in Madura District—

The original Estimate amounting to Rs 72,148 was sanctioned in G.O. No 153 W dated 18' January 1882; and the work [illegible] ordered to be carried out by the Local Fund Board. The collection of materials was then in the hands of this Department and in giving over the work to the Local Fund Department, a discrepancy in the materials at site was discovered. This was finally disposed of in G.O. No 2182 W d/4' September 1884. In March 1883 some of the rates allowed in the original Estimate were found to be insufficient and a revised Estimate amounting to Rs 73,748 was submitted by the Local Fund Engineer to this office and sanctioned in G.O. No 1005 W date 2d April 1883. Provision for a proper establishment was not made in that estima

So a supplemental estimate amounting to Rs 3200 for an establishment was therefore, submitted for sanction with this office letter dated 28' August 1885 No 302 WS which was sanctioned in G.O. No 2250 W dated 28' September 1885, making total amount of revised estimate Rs 76,948.

2. On the representation of the Supt Engineer, Tank Maintenance Scheme, the Government in their order No 34 W dated 4' January 1886 directed this Department to take charge of the work. As soon as the work was taken over, it was found that the balance of the Estimate was not sufficient to complete the works remaining to be done, and the designs for the remaining three Bridges also needed revision; hence the necessity for the revised Estimate now submitted for sanction.

This estimate is composed of the following items: —

(1)	Outlay by L.F. Department	Rs 40,737
(2)	Materials at site	6,382
(3)	Works still to be Completed	43,468
	Rs —	90,587

The works provided in (3) are as follows: —

a. Repairing bulrots & Road Dams.
b. Improving the Road once Completed but now much deteriorated & for regravelling where necessary.
c. Completing bridges over Surungan and Kakanodai Nullahs.
d) Constructing a bridge over Kuru vamuthu river.

3. The foundations for bridge over Surungan Nullah have already been built, but the present estimate provides for adding a counterforts for each abutment. The original design provided for a semielliptical arch, but the late Supt Engr, after personal inspection of the site, directed that a segmental arch should be provided. accordingly the design now forwarded provides for a arch of this kind. Regarding bridge ove Kakanodai the original design provided for one arch of 30 ft and two of 20 ft span. The late Supt Engineer after personal inspection of site decided (vid his notes of Inspections of 17' April 1885)

that one arch of 20 ft span would answer. As however the foundations are already laid up to ground level the estimate now forwarded provides for one arch of 28 ft span. With regard to design for Bridge over Karuvanuttu river, the original design provided for five arches of 40 ft span each, but the late Supt Engineer decided, after personal inspection, that a bridge consisting of three segmental arches of 40 ft span each would be large enough. Accordingly the estimate provides for a bridge of this size.

4 The rates are fair taking into consideration the unhealthy character of the climate in the Cumbum Valley; and the estimate is recommended for sanction.

J. W. Martin
Supdt of Works in ch
II. circle.
13.11.86

32/5

1859 C 18.5.86
3 W 4.1.86

P.W.C. No. 8984.

From

The Superintendent of Works
in ch of 6th Circle

To

The Chief Engineer —
P.W.D.

Dated 13 }
desp. 15 } Novr./86.
Recd. 17 }

No. 400. M.D.

Encl. 7 +11
(+4 plans)

Report on the revised Estimate of Rs. 90507. for completing the road from Cumbum to foot of Gudalur — Peermaad ghaut - Madura Dt. —

Public Works Department.

Current No. 8984
Letter No. 400 M.D.
Dated the 13th November 86
From the S.E. VI Circle

3226/6

NOTE OF REMARKS.

1. The accompanying revised estimate with plans provides for constructing a road from Cumbum to the foot of the Gudalur - Peermaad ghât in the Madura district. — This revised estimate amounts to Rs. 90,507 — being Rs. 18,359 in excess of the original estimate Rs. 72,148, sanctioned in G.O. No. 153 W. of the 18th January/82. — A revised estimate for this work amounting to Rs. 73,748 was sanctioned in G.O. No. 1105 W. of the 2nd April/83; and was in turn superseded by the revised estimate now in force, Rs. 76,947 sanctioned in G.O. No. 2250 W. of the 28th September/85.

2. The history of the case of constructing the Cumbum Gudalur road from the date of the original sanction up to the present time is very unsatisfactory, and it remain

he decided, whether the revis
timate submitted fully mee
l requirements of the case
now stands.
he revised estimate is sho
nder the two headings of the
penditure already incurr
the L.F. Boards, Rs.40,739, and
e estimated cost of work still
ected, Rs.50,150 – and by subtrac
m the latter sum the valu
the materials at site, (Rs.6382,)
rther expenditure necessary
the completion of the work
43,768, is ascertained. – The
neral abstract divides the
rk still remaining to be do
follows – (a) the repair and
val of existing culverts
[illegible] Rs.4695, (b) regravell
ond the [illegible] – Rs.4,04
nstructing a bridge over th
kanadai Nullah – Rs.4,631; (
tructing a bridge over the
nagan Nullah – Rs.3,885; an
nstructing a bridge over th
uvvanuthu – Rs.32,795.
[illegible] 6,8 Rs. 3.W. the

1st January/86 the P.W. department took charge of the work of constructing the Cumbum – Gudalur road from the 1st April, '86 and S.E. VI. now writes – "As soon as the work was taken over, it was found that the balance of the estimate was not sufficient to complete the works remaining to be done, and the designs for the remaining three Bridges needed revision; hence the necessity for the revised estimate now submitted for sanction."

5. This revised estimate for the completion of the work of the Cumbum – Gudalur road still remaining to be done when the road was taken over by the P.W.D. was prepared on the lines traced out for such work in the Inspection Notes of the 17th April, '86 of Colonel J. Pennycuick R.E. then S.E. [illegible] – It must be noted that in the case of the three revised designs of bridges (c), (d) and (e), the data necessary for the determination by calculation of the sufficiency of the waterway allowed to each, and of the accuracy of other engineering particulars are not furnished.

6. That so large a sum, Rs.4695 of (a))

should now be required for repairing the lately constructed culverts and roaddams shows their workmanship to be of a low order. The regravelling of the roads, (b), appears, at least to a great extent, to have been rendered necessary by the absence of careful supervision of the completed road's surface.

7. The proposed bridge across the Shuragam Nullah, (d), is to be of a single segmental arch of 25 feet span and 8 feet rise. The abutments are to receive, each, a counterfort. The width allowed to roadway is 17 feet between wheelguards. The original design provided a semi-elliptical form of arch which rendered counterforts superfluous and so were not originally adopted. The foundations of this bridge according to the original design have been already built.

8. The original design of the Kaka-nodai Nullah bridge provided three arches, the center arch being of 30 feet span the other two of 20 feet span, but the revised design, (c), provides for only

32/8

one arch – segmental of 28 feet span and 9 feet rise. The width of the roadway between wheelguards is 17 feet. The foundations of this bridge according to the original design have been already built but it is proposed to cause the piers to serve the purpose of abutments by the addition of a counterfort to each which, it is thought, will render them fully equal to their task.

9. The original design of the bridge proposed to be constructed across the Hurwanuthu allowed five arches, each of 40 feet span, the revised design (e), allows but three arches – each being segmental of 40 feet span and 13 feet rise. This marked difference of waterway was however only decided on after a personal inspection of the locality by Pennycuick, then S.E.VI. – Subject to approval it would be well for many reasons if the arches proposed to be adopted were semicircular and, so far as can be judged, adjacent [illegible]

will not only readily permit, but be best suited by that form of arch. — A counterfort is provided for each abutment. The width of roadway between wheelguards is 17 feet. — As may be seen on the survey the site now proposed for the erection of the bridge is not that originally decided on but one higher up stream. — Floorings of concrete with rough stone aprons, front and rear, and retaining walls are provided in the revised estimate.

10. The rates of the revised estimate may be accepted as fair.

The project has now been put into proper shape; the chief items are masonry bridges i.e. Rs 4631 one span
3885 2
32095 three spans.
The details of these have been carefully prepared, & the revised plans & estimate are recommended for sanction. — The balance required to complete the works is 31,847, of which 20,000 must be allotted for 1887 —

25/11/86

3.12.86

C. No. 8984. P. W. Secretariat.

Note by Budget Section.

Work Completion of the road from Cumbum to the foot of the Gudalur Peermaad Ghât

Remarks and References. 322/9

Fund	Provincial	
Service Head	Communications	
Departmental Head	Original Works	
Amount of Estimate	Rs.	90,507
Expenditure in previous year ...	„	46,375
Allotment in current year	„	12,285
Balance required to complete ...	„	31,847
Total Rs. ...		90,507

Note of available funds.

The current year's grant for the work is Rs. 12,285 and a sum of Rs 18,288+ being the balance of the sanctioned estimate is proposed for the ensuing official year

+ This might be increased to Rs 20000, if funds be available.

26 November 1886

Budget Clerk.

Note by Budget Section.

3226 W

B & R
Works

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 9

READ the following

Letter from the Superintending Engineer VI Circle H.E. No. 4006 dated 13th Nov. 1886

3226/10

4

The revised estimate amounting to Rs 90,507 for completing the road from Cumbum to the foot of the Gudalur Peermaad Ghât is sanctioned in supercession of the estimate for Rs 76,948 sanctioned in G. O. No. 2250 W dated 28th September 1885.

2. The expenditure on the work to the end of 1885-86 amounted to Rs 46,375, and the grant for the current official year is Rs 12,285. If, possible, a sum of Rs 20,000 will be provided in the Budget for 1887-88

for

for its ~~prosecution~~ execution

3. This sanction has been registered as Provincial No. 148 of 1886-87, and classified as communi-cations, original works.

6.12.86

Du
6/12/86

V - [illegible]
4/12/86

15 11/7/12

Du
4/12

To

The Supg: Engr. II Circle
with 10 enclosures

" Exr. P. W. Accounts
with the duplicate Supl: abst: estimate

" Financial Dept

Ch

Dw
11

3226
II

8,984

Govt. of {1886} Madras

PUBLIC WORKS.

5/12

24-1-08

12-11-09

Dated

Recd. Reg.

G.O., 7th Decr 1886, No. 3,22

Road from Cumbum
to the foot of the
Gudalur Peermade
ghat

Revised estimate of
Rs 90,507 for
completing the
sanctioned

60/4

Recd on 5/12