(1) Number of pages 22

(2) Date of repair 13. 8. 87

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W DEPARTMENT

G.O. No. 261 WP
B.P. No:

Press.
Mis.

Dated 4 — 2 — 1885 ~~198~~.

V. S. M.

Not to be folded or roughly handled

Archives I--10,006 I -80.

4TH FEBRUARY 1885, No. 261 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Colonel J. BEATTY, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 25th November 1884, No. 509 E.W.

1 Letter from the president.
1 Extract from proceedings.
1 Report.
1 Survey.
1 Sketch of profile.

In forwarding, herewith, as requested by the president, Ootacamund municipality, his report and its accompaniments regarding a considerable landslip that occurred on the 18th instant on the line of the surplus channel of the Dodabetta reservoir, I have the honor to state that I have requested the Executive Engineer, Nilgiris, to inspect the place without delay, and report whether any measures are necessary or advisable in order to prevent the possibility of damage resulting to the bund of the reservoir.

2. The spring of water observed near the head of the landslip may or may not be connected with the reservoir. I should think it was probably not, but it seems to me improbable that this point can be satisfactorily determined at present. Careful observations in the course of the dry season may settle it. The spring may be the result of the hill side becoming charged with water in the recent heavy rains.

3. It may, however, now be possible to improve the alignment of the surplus channel, or the channel itself, and to this I am directing Major Smith's attention.

4. I shall take the earliest opportunity of personally examining the place.

From the same officer, dated Ootacamund, 3rd January 1885, No. 2-C. E.W.

Original letter No. 486, of 17th ultimo, from the Executive Engineer, Nilgiri division.

In continuation of my letter, No. 509, of 25th November 1884, regarding the landslip that occurred on the surplus channel of the Dodabetta reservoir on the 18th of October last, I have now the honor to forward, for your information, a report from the Executive Engineer, Nilgiris.

2. This report I detained until I should have had an opportunity of personally inspecting the site of the slip ; and, having now visited the spot with you, I think you agreed generally that Major Smith's proposals for the safety of the surplus channel and tank are suitable and should be carried out as early as possible, with the addition of a good catch drain along the hill side above the slip, and with the understanding that the point at which the surplus is to be diverted from the old channel may be made a little nearer the reservoir and further from the head of the slip than it is at present.

3. I have requested the Executive Engineer to submit an estimate for these works as early as practicable, which I shall forward to you for orders.

Enclosure.

From Major A. C. SMITH, R.E., Executive Engineer, Nilgiri division, to the Superintending Engineer, IV Circle, dated Ootacamund, 17th December 1884, No. 486.

Survey sketch.
Hand do.
Letter from president, Ootacamund municipal commission.
Enclosure to letter from do. do.
Report on landslip.

In reply to your memorandum No. 597 N.I., dated 25th November 1884, I have the honor to report that I inspected the site of the landslip near Dodabetta reservoir on the 1st instant, and I have now seen Mr. Nery about it. I would have reported earlier, but as I considered all necessary precautions had been taken for temporary protection, I thought it better to delay this until I had seen Mr. Nery.

2. The supply for Burnfoot is quite independent of the reservoir supply or surplus, but it will not take much to restore this, and this I fancy is the work of the municipality.

3. As regards the measures to be taken to prevent further damage I would propose that—

(I) The present surplus channel and new cut be made perfectly good with masonry and concrete.

(II) That steps be taken to prevent further mischief at the slip from the percolation which evidently oozes from the reservoir, probably through the rock.

4. For (I) I should line the existing surplus channel with good blue metal concrete with slight invert section and side-walls at least 1' 6" high, and the new cut should be rendered sound with rubble masonry; and on each step I should form a small basin to act as a water cushion for each small drop.

5. For (II) it will be necessary to revet with large bolders built upright from the rocky bottom of the slip in dry rubble the front and sides of the gully or cut in the slip to the very top, and at the top I would place a good solid clay bank lined with concrete on the inner or surplus channel side and backed with roughstone revetment (behind the concrete) built in cement, as this face will be exposed to the full rush of the surplus water from the reservoir and, being on a curve, will be the weak spot. To prevent further mischief from the spring I would at its exit on the front face of the slip, revetted as above proposed, build a small masonry in cement spout or trough to guide the falling water over the rocky face of the slip; this trough to be carried as far back as possible into the face of the slip, so as to prevent the water getting behind the revetment.

From Colonel J. BEATTY, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 17th January 1885, No 20. E.W.

1 Estimate. | 1 Survey.
1 Report. | 1 Section.

As promised in my letter, No. 2 C., of 3rd instant, I have the honor to submit, herewith, an estimate of Rs. 12,910 for putting the surplus channel of the Dodabetta reservoir, which was badly damaged by the landslip of 18th October 1884, into a condition of safety; and for restoring the supply of water to Burnfoot and Craigmore, which was completely cut off by the landslip.

2. The estimate provides for coating the sides and bed of the head of the surplus channel for a length of 180 feet with Portland cement concrete, to stop any leakage from it, and for turning the surplus down the hill side from that point by a series of masonry drops; also for cutting catch drains above the old channel and the site of the slip and for sloping the sides of the slip. The cost of these works will be about Rs. 11,400. The supply of water to Burnfoot and Craigmore will also be restored by a dam about 130 feet long and 25 feet high, revetted in front and turfed in rear. This dam would cost about Rs. 1,510.

Order—dated 4th February 1885, No. 261 W., Public Works.

The estimate, amounting to Rs. 12,910, for improvements to the surplus channel of the Dodabetta reservoir at Ootacamund, is sanctioned.

2. The Superintending Engineer, IV Circle, will report what sum can be spent on the work during the current official year.

3. This sanction has been registered as Provincial No. 241 W. of 1884-85, and classified as Miscellaneous Public Improvements, Original Works.

(True Extract.)

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

To the Superintending Engineer, IV Circle, with nine enclosures.
" Examiner, Public Works Accounts, with abstract estimate.
" Financial Department.

Exd. E. Fernandez.
Spare Copies.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madras

PUBLIC WORKS.

Dated February, 188

Recd. Encl.

G.O., 4th Feb. 1885, No. 261 W.

FEBRUARY.

Dodabetta Reservoir at Ootacamund

Estimate for improvements to the surplus channel of the — sanctioned.

Sanction
CH
30.1.85

Public Works Department, 1884-85.

Current No. [illegible]
Letter No. [illegible]
Dated the [illegible] 85
From the S.E. IV C.

NOTE OF REMARKS.

The accompanying plans and estimate provide for effecting improvements to the Dodabetta reservoir at Ootacamund. The estimate amounts to Rs. 2,910.

2. It is proposed to coat the sides and bottom of the existing surplus channel for a length of 181 feet from its head with Portland cement concrete, and to provide for diverting the surplus water from its old course at the extremity of that length by a series of masonry drops down the hill side. It is nec

proposed to cut catch drains above the old channel, and the site of the land slip, besides sloping the sides of the slip. In addition, the estimate provides for restoring their former water supply to the Burnfoot and Craig More estates by means of a dam 130 ft. long and 25 ft. high, revetted in front and turfed in rear, and at a cost of Rs. 1,510.

3. It may be learnt from S.E.W.'s letter No. 20/E.W. of the 5th Jan/85, that the lines on which this estimate is based have received E.W.'s general approval. The position of the point of divergence of the surplus water from the old channel has been fixed, and the catch drain above slip provided by order of E.W.

29th Jan, '85

C. No. 510.

Note by Budget Section

Work - Improvements to the Dodabetta Reservoir at Ootacamund — Remarks & References.

Fund. —— Provincial

Service Head - Miscellaneous Public Improvements.

Departmental Head - Original Works.

	Rs
Amount of Estimate ——	12,910
Expenditure in previous year ——	"
Allotment in current year ——	"
Balance required to complete ——	"
Total Rs.	12,910

Note of available funds.

The balance of Provincial reserve is Rs 71,161. From this sum Rs 51,852 will have to be appropriated to cover the net debit balance in the suspense accounts as required by the Examiner in his office note No. 771 dated 29th January 1885. Deducting this amount, the net balance of reserve will be Rs 16,809. No provision has been made for the work in the Budget for 1885-86.

Maj

Note reg Budget

No. 509
W.

Supg Engineer's Office 4th Circle
Coimbatore, 25 November 1884.

From,
The Superintending Engineer,
IV Circle;

To,
The Chief Engineer,
P. W. Department.

Sir,

In forwarding herewith, as requested by the President Ootacamund Municipality, his report and its accompaniments regarding a considerable landslip that occurred on the 16th instant on the line of the surplus channel of the Dodabetta Reservoir, I have the honor to state that I have requested the Executive Engineer Nilgiris to inspect the place without delay and report whether any measures are necessary or advisable, in order to prevent the possibility of damage resulting to the bund of the Reservoir.

Enclosures 5
1 Letter from the President
1. Extract from Proceedings
1. Report
1. Survey
1. Sketch of
[illegible]

2. The spring of water observed near the head of the landslip may or may not be connected with the reservoir. I should think it was probably not, but it seems to me improbable that this point can be satisfactorily determined at present. Careful observations in the course of the dry season may settle it. The spring may be the result of the hill side becoming charged with water in the recent heavy rains.

3. It may however now be possible to improve the alignment of the surplus channel, or the channel itself, and to this I am directing Major Smith's attention.

4. I shall take the earliest opportunity of personally examining the place.

I have the honor to be
Sir
Your most obedient Servant.

J. Beatty Colonel R.E.

Superintending Engineer 1st Circle

To W. for perusal

C.J.

28-11-84

From

The Supg. Engineer,

Fourth Circle.

Dated 25th Nov: /84.

Despd. 26th Do.

No. 509 / W

Enc: 5.

W.R. Obs 12 of 15

Dodabetta Reservoir

Land-slip.

Forwarding letter from the President of the Municipality with its enclosures regarding the

---

No. 2 C / E.W.

Superintending Engineer's Office

Camp Ootacamund.

3rd January 1885.

261

From

The Superintending Engineer

IVth Circle

To

The C[illegible] Engineer

Public Works Department

Madras

Sir

Enc - 1 original letter No. 486 of 17th Do. from the Ex: Engr. Nilgiris Do.

In continuation of my letter No. 509 of 25th November 1884 regarding the land slip that occurred on the surplus channel of the Dodabetta reservoir on the 18th of October last, I have now the honor to forward for your information a report from the Executive Engineer Nilgiris.

2 This report I detained until I should have had an opportunity of personally inspecting the site of the slip - and having now visited the spot with you I think you

agreed

agreed generally that Major Smith's proposals for the safety of the surplus channel and tank are suitable and should be carried out as early as possible; with the addition of a good catch drain along the hill side above the slip, and with the understanding that the point at which the surplus is to be diverted from the old channel may be made a little nearer the reservoir and further from the head of the slip than it is at present.

3 I have requested the Executive Engineer to submit an estimate for these works as early as practicable: which I shall forward to you for orders.

I have the honor to be
Sir
your most obdt. Servt.

Colt. R.E.
Superintending Engineer
Nth Circle

From

The Superintending
Engineer
IVth circle

To

The Chief Engineer
P.W.D.

Dated 3
Desp 3 } January/85
Recd

[illegible]

No. 2.C
E.W.

Enc 1.

Land slip near the
Dodabetta Reservoir
In continuation
of letter No 509 of
25th Novr/84, for-
-wards the report of
the Executive Engineer
Nilgiris on the —

No 486 Executive Engineer's office
Ootacamund 17th December 1884

From,

The Executive Engineer
Nilgiri Division

To,

The Superintending Engineer
Fourth Circle

Sir,

In reply to your Memo No. 597/A.P. dated 25th November 1884 I have the honor to report that I inspected the site of the land slip near Dodabetta Reservoir on the 1st Instant, and I have now seen Mr. Story about it. I would have reported earlier but as I considered all necessary precautions had been taken for temporary protection, I thought it

Enclosures here with returned

Enclosures
1 Survey Sketch
1 Hand Do
1 Letter from President Muc
1 Enclosure to Do
1 Report on Land Slip
6 Total

it better to delay this until
I had seen Mr Nery.

2. The supply for Burnfoot
is quite independent of the
Reservoir supply or surplus
but it will not take much
to restore this and this
I fancy is the work of
the Municipality.

(3) As regards the measures to be taken to prevent further damage I
would propose that,

(I) the present surplus channel
and new cut be made
perfectly good with
masonry and concrete.

(II) That steps be taken to
prevent further mischief
at the slip from the
the percolation which evidently
oozed from the reservoir, probably
through the rock.

(4) For (I) I should line the
existing surplus channel with
good blue metal concrete
with slight invert section
& side walls at least 1'-6"
high and the new cut
should be rendered sound
with rubble masonry and
on each step I should
form a small basin
to act as a water cushion
for each small drop.

5. For (II) it will be
necessary to revet with
large boulders built
upright from the rocky
bottom of the slip in

dry

dry rubble the front and sides of the gully or cut in the slip to the very top, and at the top I would place a good solid clay bank lined with concrete on the inner or surplus channel side and backed with rough stone revetment (behind the concrete) built in cement, as this face will be exposed to the full rush of the surplus water from the reservoir and being on a curve will be the weak spot. To prevent further mischief from the spring I would at its exit on the front face of the slip

slip—revetted as above proposed—build a small masonry in cement spout or trough to guide the falling water over the rocky face of the slip, this trough to be carried as far back as possible into the face of the slip, so as to prevent the water getting behind the revetment.

I have the honor to be
Sir
Your most Obt Servt

Al Smith Major R.E.
Exe Engineer

coating

[illegible]

From

The Executive Engineer
Nilgiri Division

No 486

Dated 17th
Received } December 1884

Enclosures 5

Land slip below the
Dodabetta Reservoir –

Report his views on the
recent – after care-
-ful inspection.

No 20
E.W.

Supg Engineers Office 4th Circle
Coimbatore 17th January 1885.

From
The Superintending Engineer
4th Circle

To,
The Chief Engineer
Public Works Department

Sir,

Enclos: 4.
1 Estimate
1 Report
1 Survey
1 Sections
4

As promised in my letter No 20 of 5th instant I have the honor to submit herewith an estimate of Rs 12910 for putting the surplus channel of the Dodabetta Reservoir, which was badly damaged by the land-slip of 18th October 1884, into a condition of safety, and for restoring the supply of water to Burnfoot and Craigmore which was completely cut off by the landslip.

2. The estimate provides for coating

coating the sides and bed of the head of the surplus channel for a length of 180 feet, with portland cement concrete, to stop any leakage from it; and for turning the surplus down the hill side, from that point, by a series of masonry drops; also for cutting catch drains above the old channel and the site of the slip; and for sloping the sides of the slip. The cost of these works will be about Rs: 4400. The supply of water to Burnfoot and Craigmore will also be restored by a dam about 130 feet long and 25 feet high, revetted in front and turfed in rear; this dam would cost about Rs 1,510.

I have the honor to be
Sir,
your most obdt servt
J. Beatty - Colonel R.E.
Supg Engr [illegible] Circle.

2/

From
The Supg. Engineer
IV Circle

Dated 17th } January, 1885.
Despd 20th }
Recd. }

21 JAN 85

No. 20/E.W.

Enclosure 4
Webb do Peters

Dodabetta Reservoir

Submits an estimate amounting to Rs 12910 for putting the surplus channel of — into a condition of safety & for restoring the supply of water to Burnfoot & Craigmore.

Buildings & Roads
Civil Works

Form No. 22. No. 261. W PUBLIC WORKS DEPARTMENT,

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 4th February /85

READ the following:—

261/10

From the S.E. IV Circle ... (No. Ex 509 E.W. d/ 25 Novr. 1884
Do. do. (" ... No. 2C/E.W. d/ 3rd Jany 1885
Do. do. (" ... No. 20/E.W. d/ 17 Jany 1885

The estimate amounting to Rs 12,910, for improvements to the surplus channel of the Dodabetta reservoir at Ootacamund, is sanctioned.

2. The Supdg Engineer IV Circle will report ~~whether any, and if so~~ what sum can be spent on the work during the current official year.

3 | 10

This

3. This sanction has been registered as Provincial No. 241 W of 1884-85, and classified as Misc Public Improvements, Original Works.

3. 2. 85.

To
S. E. IV Circle
With 9 enclosures.
Exr: P. W. Acct: with abstract estimate
Civil: Deptt.

261/11

9886

Govt. of [1885] Madras.

PUBLIC WORKS.

Press
5-2-85

70
3

11