

(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.

B.P. No.

1787 A.

Press

Mis.

Dated

3 - 7 - 1954

Not to be folded or roughly handled

No. 93 Salem Range Office,
Salem, 20th May 1894.

From

The Assistant Engineer,
Salem Range.

The Offr. District Engineer
of Salem.

Enclosure:
Rough sketch.

In reply to your endorsement
No. 909 of the 27th February 1894 on Memo
dated 8th idem from the Inspecting Engineer
for Ports and Communications, I have
the honour to inform you that the
tracing of a line for a cart road
from Salem to Yenkaud is not yet
sufficiently advanced to give the infor-
-mation called for with accuracy but
as it will be some time before it can
be done, I shall shew you as nearly
as possible, the progress which has
been made.

Enclosed is a rough sketch of
part of the Shevray Hills, showing
the

to present bullock carts and some
of the principal Yorkland Station roads
(in black) the lines that have been
traced for the new road (in red) and
the proposed final trace (in dotted red).
The instrument used was a D. L. L. L.
Eclimometer, which I believe to be more
than sufficiently accurate for a trial
trace.

The starting point is on the road
from Salem to Yorkland at a point
about 4 miles 5 furlongs from Salem
Post Office and about 7 miles from
Shoanangalam for Salem Railway
Station. The first two furlongs are
on the flat but in order to gain
the saddle at the point. A. the road
would have either to be banked out
into the flat for a short distance
if on the hard line, or taken round
the spur as on the dotted line, the
latter being uniformly flat as to
gradient. From this point. A. up
to the point. B. on the saddle of a small
spur on the face of the largest (or Brynnon's)
spur, the instrument was set at $1 \text{ in } 18\frac{1}{2}$
in the belief that this would give when
worked

worked out a ruling gradient of $1 \text{ in } 18$. I found however from further
experience gained in working out the
details of part of the line with a
Gunn's quadrant that this is not
sufficient, but by sacrificing some
of the many flat places left at the
crossings of nullahs I am certain
that there need not be any part steeper
than $1 \text{ in } 16$, and that the average gradient
would be not steeper than $1 \text{ in } 17\frac{1}{2}$.
The distance from starting point to
B. is about 6 miles, of which the
first 4 are on comparatively easy
ground getting gradually more rocky
until the 5th and 6th become a series
of small nullahs with spurs of rock
between, but none of these would
be more than difficult to overcome,
as the whole could be done with
small blasts, which would give
the best of materials for the small
culverts which would be required
and there are about 3 furlongs in these
2 miles which are on flat spurs
and soft ground which would be
exceptionally cheap.

This line for the greater part of its length is at the foot of precipitous rocks, (in and just on the top of the debris which travel has been washed down from them; so that the taking a higher starting point, (which might be done by commencing where Col. the present ghaat begins to rise, crossing the stream, and rounding the western spur) would carry the line along the face of vertical rocks for about one third of its length, and therefore nearly double the cost of making the road.

Continuing onwards from B without zigzagging, the rocks are so precipitous that it is altogether out of the question to attempt making a road along this line and on turning downwards from the top on 1 in 18½ taking the line along the first saddle so as to round the lower spur at C. and get as much ground as possible, it was still found that a zigzag would be necessary to gain the top near Yekhaud; the continuous line would cross the Kylyar valley as is shown roughly by the black dotted

dotted line and go away northwards until it came to Taylor's saddle about 3 miles north of the lake.

A zig-zag therefore being necessary, it also gives an opportunity of avoiding the impracticable ground between B and C.

Then to determine what length of zigzag was necessary the upper line from the lake saddle was continued crossing the first saddle at A down to the third or Rugeron's saddle; here the line on 1 in 18½ was too low to cross the saddle, but as it is much easier ground the top of the saddle was taken as a starting point to find the zigzag point. Then continuing downwards on 1 in 18½ to C. where the ground again becomes impracticable and turning north and west towards B. on 1 in 16 the line (hard red line on sketch) came in about 125 feet above B.

This and chaining along the line marking miles and furlongs is all that has been done. What remains before cutting a pathway

can be commenced, is "the about
the zigzags. This might be done by
making two zigzags or by forcing
the two lines through whatever ground
there may be until they meet south-
ward of C. or as proposed by Major
Hunter to carry the line round the
top of Bugaron's saddle as shown
by the dotted red line. This last
would get over the difficulty of
having the upper part of the ghaunt
flatter than is necessary.

The distance from the starting
point to the sign post on the lake
saddle is along the dotted line about
eleven miles one furlong, and if the
road is carried on to Charing cross,
(the centre from which the Yenkaris
roads start) the distance would
be 12 miles 1 furlong.

The jungle has been cleared
for a breadth of 8 yards (average)
along the part of the line where
dotted and hard red lines coincide
except through about a mile
of coffee land at the top, where
the

Trace is marked by large p

I have &c.
(Signed) G. J. Turner,
Assistant Engineer.

(True Copy)

N. Bailey Captain,
Off. District Engineer.

No 44

The Off^r District Engineer
of Salem.

The Secretary of Government
D. P. W.

I have the honor to forward for
your information copy of a report from
the Assistant Engineer in charge of the
Salem Range on the trial trace for the
year and a half.

Ch.

H. Bailey

Off^d District Engineer

Laurel 2
of letter
etch.

Public Works Department
 Proceedings of the Madras Government
 40 Nov 1874 of 3rd Read the following
 from the Offs of Engineer July 1874.
 Salun W. B. & Co. dated
 3 June 1874

Advantage will
 be taken of Capt. Bailey's
 practical experience in
 plant tracing, and of his
 being extra to the esta-
 blishment of Range Of-
 fices in the Salun Dist.
 to utilize his services in
 completing the trace of a
 carriage Road between
 Salun and Vereand and
 opening

20/6

Salun Dist. of 3rd
 40 Nov 1874 of 3rd
 from the Offs of Engineer July 1874.

P.D. 1874 Salun.
 No. 3422.
 The Offs. Salun. Engineer
 to
 of Salun.
 The Secy. to Govt.
 S. B. W.

Dated 3rd June 1874
 Recd 2nd 8th June 1874

Forwarding for
 information copy
 of a Report from
 the Offs. Engineer
 Salun District on the
 trial trace for the
 proposed Salun Dist.
 W. B. & Co. 1874. 3-7-74

0/2 5/2 2/4
 1874 1874 1874

opening it as a Bridle
path, out yard out of
the solid; for which it
is understood that funds
have been provided by
the Great Board.

Comm

To The N. B. Salem
Financial Dept.
Controller of N. B. A.

spec. copies despatched
on the 28-7-74

520-526

Mr. S. depts 3/7/74 only to the
S. Copies despt. to the 20/7/74

On 20/6/74 R to 3/7/74

3422

GOVT. OF 1874
PUBLIC WORKS.

The Dist. Inpr.
Salem

2
5 July 1874

52A.52B.

Carriage road between
Salem and Yercaud.

Captain Bailey's
services to be utilized
in completing the trace
of the road and opening
it as a bridle path.

On 20/6/74 R to 2/7/74

S. Capel despatched to Salem
20/7/74