

(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.	2605	Press
B.P. No.		Mis:
408-409		
Dated	24-10-1873	195

Not to be folded or roughly handled

173

*Proceedings of the Madras Government, Public Works Department,
24th October 1873.*

No. 408. Read the following endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 17th September 1873, No. 648:—

From Major R. F. OAKES, R.E., District Engineer, Tanjore, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Tanjore, 1st September 1873, No. 571.

With reference to your Memorandum, No. 533, dated 21st August, I have the honour to inform you that since I addressed you, on the 19th April, 19 $\frac{1}{2}$ miles of the Coleroon have been surveyed, and I have discovered that 9 $\frac{1}{2}$ miles had been surveyed near the lower anicut, of which I was not aware, making 29 miles in all, and leaving 64 miles still to be surveyed and plotted. The work progresses slowly and has been interrupted by the late floods and impeded by the high westerly winds which prevail at this season of the year.

2. From my letter No. 41, of 3rd April 1872, when acting as Chief Engineer for Irrigation, you will observe what I directed should be done. Certain sections were taken, but, after a careful examination of them, I am of opinion that no reliance can be placed upon them or upon the water-marks recorded in pencil upon them; while, as no velocities were taken or surface falls recorded, the quantities passing through them were not calculated but were taken from Captain Mead's calculations, submitted with his Report of 1866; no satisfactory deductions can be made from them.

3. Unless the work required is put into the hands of an Executive Engineer of some experience, and he is employed solely upon it, I am convinced that no satisfactory result will be obtained. With so large a river to deal with, the greatest care and attention will be required in making observations even to admit of approximate correctness in the results.

R. No. 1,449 dated 1st September 1873.

SUBMITTED to Government with reference to G. O., No. 2,252, of the 12th instant.

I agree with Major Oakes in considering that satisfactory results will not be obtained from the investigations, into the circumstances of the Coleroon, which have been more or less in progress for some two years and a half, without employing upon them an officer capable of making correct observations and intelligible deductions therefrom; but at the same time I think that very much more might have been done, than has been accomplished, towards the desired end. A great deal of what may be called the preliminary work is within the competency of good Surveyors. The survey of the river, the longitudinal and cross-sections, might all have been taken by this time, and arrangements might have been made for recording the height attained by the water in each fresh at each cross-section. So far there is nothing which Surveyors, and during the season of the freshes a few Ameens working under them, could not have done, and such data would have been valuable for the determination of surface falls, etc.

2. The observation of velocities and the calculation of discharges need much greater knowledge and care than could be expected from Surveyors, and an

officer of some experience in hydraulic problems will be needed to make these; but no officer, however skilful, could deduce anything without the data which the Surveyors can supply, and advantageous as it would have been to have employed a considerable number of these under the supervision of an officer, as this happened not to be practicable, the best that was possible should have been done without that assistance.

3. The District Engineer has been requested to submit a statement showing what has been done in each month by the Surveyors employed, and to furnish a similar statement monthly for the future.

4. Major Oakes has in a letter, * which will shortly be laid before Government, given a great deal of valuable information as to the discharges of the Tanjore rivers at different points in the fresh of July last, which reached 10' 1" on the Cauvery dam gauge at the upper anicut. He has shown what water passed over the upper anicut into the Coleroon and what was surplus into that river below this from the Cauvery. Now, had all the cross-sections of the Coleroon been completed, and had the water levels at intervals of even a mile at these been noted and especially also at those sections below the different surplus works, data for deductions of considerable value would have been available. A great deal was done, particularly in recording the highest water levels of that fresh on the principal masonry works of the delta, and the District Engineer must be prepared to note the levels of the next high fresh, at moderate intervals, on both banks of the Coleroon. Such a fresh may occur in November, and so there is not much time to spare.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 409.

ORDER THEREON, 24th October 1873, No. 2,605.

IRRIGATION, No. 35.

ORDERED to be recorded.

2. His Excellency the Governor in Council relies on the Chief Engineer for Irrigation and District Engineer of Tanjore to take the necessary measures not only for obtaining the preliminary surveys and levels, but for taking the subsequent observations and making deductions from them, required in connection with the works proposed for regulating the Cauvery and Coleroon Rivers. There is a special Officer of Engineers attached to the Tanjore District, and with his assistance to check surveys and make observations, it appears to the Government that the District Engineer should be capable of working out the final results.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Tanjore.
.. Chief Engineer for Irrigation.

Exd. S. T. Austin.
Spare Copies.

No. 571 District Engineer's Office
Tanjore 17th September 1872

From Major R. F. Oakes, R.E.,
District Engineer, Tanjore.

Lieut. Col. J. Mullins, R.E.,
Chief Engineer for Irrigation.

With reference to your memo

No. 533, dated 21st August, I have the honor to inform you that, since I addressed you on the 19th April, 1972

No. 57. 9 miles of the Coleroon have been surveyed in G.O. No. 1396 and I have discovered that 9 3/4 miles of 19th May had been surveyed near the Lower Anicut of which I was not aware, making 29 miles in all and leaving 6 1/4 miles still to be surveyed & plotted. The work progresses slowly and has been interrupted by the late floods and impeded by the high westerly winds which prevail at this season of the year.

From my letter No. 41 of 3rd April 1872 when acting as Chief Engineer for Irrigation, you will observe what I directed should be done. Certain sections were taken

taken but after a careful examination
of them I am of opinion that no re-
liance can be placed upon them or
upon the water marks recorded in
junction upon them; while, as no val-
ues were taken or surface falls re-
corded, the quantities passing through
them were not calculated but were
taken from Captain Mead's calculations
submitted with his Report of 1866, no
satisfactory deductions can be made
from them.

Unless the work required is
put into the hands of an Executive
Engineer of some experience & he
is employed solely upon it, I am
convinced that no satisfactory result
will be obtained. With so large a River
to deal with, the greatest care and
attention will be required in making
observations even to a point of approxi-
mate correctness in the results.

I have the honor to be

Yours most obedt Servt

J. F. Walker Esq
District Engineer Tanjore

Officers can be spared for
this purpose for more
than a few months at
most, it is essential
that all preliminary
work should in the
meantime be got
through, so that the
best data obtainable
may be ready for his
use.

3 Ordered that a
copy of these Proceedings
be forwarded to the
Government of India
in continuation of the
letter No 225 of the 12th
Instant.

St. Aug. Sangre
Chief Surveyor for Ind. Geo.

Deputy

From Col. No. 1449
The District Engr.
Sangre.
To, The Chief Engr. for
Sangre.
D. O. No.
No. 571
Dated 1st September
Received 3rd September
This is to certify that
the above is a true copy
of the original
Report relative
to the progress made
in the Coleroon Survey
4000-2005-24-10-73
P. W. 5796/73.

Box 107

Copy of the
above forwarded to the
Government of India.

W. H. 20/9/73.

Heron Savings

P. 703

N^o 648

Submitted to Government with
reference to G. O. N^o 2252 of the

Enclosure - 12th Instant.

N. No. 1449 of 12th
September 1873.

I agree with Major Oakes in
considering that satisfactory results
will not be obtained from the
investigations into the circumstances of
the Coleroon, which have been more
or less in progress for some 2½ years,
without employing upon them an
officer capable of making correct
observations, and intelligible deduc-
tions therefrom, but at the same
time I think that very much
more might have been done than
has been accomplished, towards the
desired end. A great deal of what
may be called the preliminary
work is within the competency of
good Surveyors. The Survey of the
river

Recd 16 Oct 25 Sept 73

river, the longitudinal and cross sections, might all have been taken by this time, and arrangements might have been made for recording the height attained by the water in each fresh at each cross section. So far there is nothing which Surveyors, and during the season of the freshes a few Amiens working under them, could not have done, and such data would have been valuable for the determination of surface falls.

2 The observation of velocities and the calculation of discharges need much greater knowledge and care than could be expected from Surveyors, and an officer of some experience in hydraulic problems will be needed to make these, but no officer however skilful could deduce any thing without the data which the Surveyors can supply, and advantages

advantageous as it would have been to have employed a considerable number of these under the supervision of an officer, as this happened not to be practicable, the best that was possible should have been done without that assistance.

3 The District Engineer has been requested to submit a statement showing what has been done in each month by the Surveyors employed, and to furnish a similar statement monthly for the future.

4608 of the 9th Sept 73 Major Oakes has in a letter which will shortly be laid before Government given a great deal of valuable information as to the discharges of the Tanjore rivers at different points in the fresh of July last, which reached 12.5 feet on the Cauvery dam gauges at the Upper Anicut. He has shown what water passed over the Upper Anicut into the Coleroon and what was

13/3
was surplused into that river
below this from the Quarry &
Now had all the cross sections
of the Coleroon been completed, and
had the water levels at intervals
of even a mile at these been noted,
and especially also at those sec-
tions below the different surplus
works, data for deductions of
considerable value would have
been available. A great deal was
done, particularly in recording the
highest water levels of that fresh
on the principal masonry works
of the Delta, and the District
Engineers must be prepared to note
the levels of the next high fresh
at moderate intervals, on both
banks of the Coleroon. Such a
fresh may occur in November,
and so there is not much time to
spare.
Fort St George, 17th September 1873
Lieut Col P.S.
Chief Engineer for Irrigation.
The Secretary to Government
P.W.D.

Coleroon

~~was published in the~~

Public Works. 1873. Dept.
Pro: of Govt for Ceylon
No. 648
From No. 5196.
The Chief Engineer for
Irrigation
To
The Secretary to Govt.
C. W. D.

Dated 17th
Dispt. 22nd } September
Received 22nd } 1873.

Encl.

Submits with observa-
tions the Report of the
Dist. Insp. Tanjore rela-
tive to the progress made
in the Coleroon Survey.

No 408

sent to Art. 25 Sept 73

No 2605-25 act 73.

P. W. D.

...and with the...
...to have...
...the...
...the...
...The Government...
...desire that the special...
...attention of the District...
...Engineer Tanjore may...
...be given to the observa-
...tions of the Chief En-
...gineer for Irrigation,
...contained in these...
...Proceedings. The Sur-
...veys, it is evident,
...have done much left
...in connection with the
...Coleroon

Coleroon Surveys than
might have been accom-
plished, and at any
rate all the work that
they can do should be
done with the least
possible delay.

2 It is possible that,
when the Surveys and
levels have been completed
or are approaching com-
pletion, an Officer of
some experience may be
made available for a
short period for taking
observations and working
out the calculations of
discharge, but ^{as} it is ex-
tremely unlikely that
the services of such an
Officer

No. 2605
Pro: of the Madras Govt
Read the following:
From,
The Chief Engineer
for Irrigation } (H. E. D. 6487/78
Sept 1/78.)

Ordered to be
recorded.
His Excellency the
Governor in Council
relies on the Chief
Engineer for Irrigation
and District Engineer
of Tanjore to take the
necessary measures
not only for obtaining
the preliminary sur-
veys and levels, but
for taking the subse-
quent observations

and making deductions
from them required
in connection with
the works proposed
for regulating the
Canary and Coleroon
Rivers. There is a
special officer of Engineers
attached to the Bangalore
District and with
his assistance to check
surveys and make
observations it would
appear to the Govern-
ment that the Dis-
trict Engineer should
be capable of working
out the final results.

GMM

h: 408.9

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3
Lt. Col. Engr. Bangalore
Ch. Engr. for Bangalore
S.C. dated 31/10/73

701
205
No 5796
Govt. of 1873 Madras.
PUBLIC WORKS.

to The District Commr.
Lanjore

Date

Recd.

Encl. 1

G. O. 24th Dec 1873, No. 2565.

Nos 4089-409

Caleroon Surveys. Paper

orders in note by the
Chargor for Brief on
Report from the St. Sur.
Lanjore on the progress
made with the Surveys.

11/10/73