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(2) Date of repair 29.10.81

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No. / B.P. No.	5415	Press. / Mis.
Dated	12.9.1877	197 .

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Archives 1—10,006—19-4-79.

5415
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

31st August 1877, No. 674 W.

Buildings and Roads.
Civil Works.

Read the following papers:—

No. 982.

No. 310. MEMORANDUM.

ADVERTING to Lieutenant-Colonel Mullins' Memorandum recorded with G.O., No. 1,079, of the 29th March 1877, the Superintending Engineer's attention is called to the omission in the details of his project therein noticed, which he will be so good as to supply at an early date, taking care that the project is submitted in a clear and complete form to the Chief Engineer.

Meanwhile, it is presumed that under authority conveyed in the Government Order above quoted, the work has been put in hand as a Famine Relief Work.

(Signed) W. FAREWELL, Colonel, R.E.,
17th April 1877. Dy. Chief Engineer, P.W.D.

No. 310-A. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer, Public Works Department, dated St. Thomas' Mount, 23rd April 1877, No. 271.

IN reply to your No. 982, of 17th instant, I have the honor to observe that I have not been favored with any instructions as to your wishes.

2. The drainage of 15 square miles falls into the swamp near Washermanpetta and Satankadu is 3,420 cubic feet per second; this water now runs into the Corteliar over the lock gates and a low bank dividing the East Coast Canal from the surplus channel of the Red Hill tank and into the Cooum.

3. It cannot reach the Red Hill surplus directly because of the raised causeway from Tirvatur bridge to Satankadu tank, which completely closes the swamp and throws all the water into the canal.

4. The free flow of water in the swamp would be further delayed, even if the causeway did not exist, by the water of the Corteliar when in flood standing up its bed as it does every year that the bar is opened at the wrong place whether artificially or naturally.

5. I cannot get data from which to calculate how long this obstruction lasts, and I submit that they are of very little importance, for even the tide would require us to replace the whole causeway by a line of low vents if we are to attempt really to drain the water from Veysaurpady, &c.

6. Feeling clear that so expensive a proposal would not be sanctioned, I limited myself to designing a bridge in the Tirvatur causeway of the same pattern as in the causeway two miles above it, and to cutting a channel, a mere ditch, large enough to make a good embankment along the East Coast Canal on which Mr. Burrows suggested making a road hereafter.

7. It will afford an outlet for the water which is now kept in the swamp or passed into the East Coast Canal with a lock at its lower end.

8. It did not occur to me that it would be necessary to send cross sections of such a trifling ditch. My estimate allows for work at ordinary rate.

9. The drain will really be the whole swamp nearly half mile across, but everything must be limited by the masonry work in the causeway near Tirvatur bridge, and I shall be glad to know what you propose that I should provide for there.

10. My arrangements must be modified, as the President, Municipal Commission, has erected a new night soil depôt across my line of drainage, and has commenced a road, forcing water from Washermanpetta bridge *into* the East Coast Canal.

11. As soon therefore as I understand on what scale you propose that I should deal with this work I will prepare my future plans.

12. I have not begun work, first, because under G.O.,* No. 1,155, of 5th April 1877, Public Works Department, I understand that only the Revenue Department are to carry them out from famine relief, and, second, because for some days at least the Municipal President has full employment for all his people.

* No. 681, dated 15th February 1877, R.D.

No. 310-B. No. 1,100.

MEMORANDUM.

IT is not intended to interfere with the Superintending Engineer's original project. No further instructions appear necessary than that the Superintending Engineer should revise the plan and estimate for the sluice bridge as suggested by the Chief Engineer for Irrigation in his Memorandum printed with G.O., No. 1,097, dated 29th March 1877, and with it submit a regular estimate for the construction of the drain and flood embankment, and give approximately the data on which he has determined the sectional areas of the drain sluice vents together with that of the flood embankment.

2. As the earthwork is to be carried out under orders of the Municipal Commissioner as a Famine Relief Work, the line of the drain should, as early as possible, be marked out under the orders of the Superintending Engineer, and he should supply the Municipal Commissioner with a specification, giving the depths, bottom, width and side slopes of the drain throughout, its length, and the position and section of the flood embankment to be formed from the excavated spoil.

FORT ST. GEORGE,
27th April 1877.

(Signed) E. A. FOORD, Colonel, R.E.,
Chief Engineer, P.W.D.

No. 310-C. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 18th July 1877, No. 1,429.

I HAVE the honor to enclose a plan for a sluice bridge prepared agreeably to instructions in Memorandum No. 1,100, dated 27th April 1877, for the passage of drainage from Veysaurpady under the road running from Trivatur to Ponery, and solicit early sanction for the estimate and an allotment of money for its execution.

One Plan.
" Estimate.

2. The channel by which this drainage is to be carried from Veysaurpady to the surplus channel from Red Hills lake is in progress as a famine work under the Municipal authorities; the earth excavated is formed into a road or bank to exclude rain water from the East Coast Canal, along the side of which it is laid out as explained in my No. 3,272, endorsed by G.O., No. 1,079, of 29th March 1877.

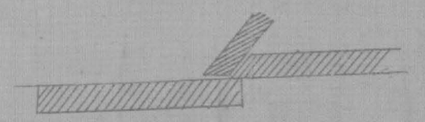
3. If the sluice now asked for is not built, there will be no outlet whatever for the drainage, and there will be greater loss and injury than before. I have retained the plan, &c., in my office for some weeks, hoping to get the estimate for the drain,

but Lieutenant Wiffen has a very great deal of work in his office and all the computations of Lieutenant Smither's measurements of Mr. Woolley's clearings in East Coast Canal. I am afraid therefore of longer delay, and trust that the Government will allow me to put the sluice in hand at once.

No. 2,129.

No. 310-D. MEMORANDUM.

THE Chief Engineer deems a little more care in the arrangement of the detail of the sluice gates to be required; he considers their falling on the sluice floors will be liable to destroy the floor, and thinks they should rest against a strong stone sill cut to their angle of rest when closed, thus:—



and that they should be swung on heavy iron staples let in leaded and anchored very firmly into stone at least four feet into the spandrels; the shutters not reaching higher than the crowns of the arches. The necessity of the wall marked in blue chalk is not understood.

2. The plan of the sluice bridge is herewith returned for correction and retransmission to this office as early as possible.

FORT ST. GEORGE,
2nd August 1877.

(Signed) E. A. FOORD, Colonel, R.E.,
Chief Engineer, P.W.D.

No. 310-E. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer, Public Works Department, dated St. Thomas' Mount, 23rd August 1877, No. 1,988.

I HAVE the honor to forward an estimate for cutting a drain and making up the west bank of the East Coast Canal from the railway embankment to the surplus channel from the Red Hill tank as approved in G.O., No. 1,079, of 29th March 1877.

1 Estimate.
1 Sluice plan.
1 Plan of shutter.
2 Longitudinal sections.

2. The President, Municipal Commission, has arranged for a sewage depôt in this neighbourhood; alterations in its site and form have delayed the preparation of the estimate for the drain, which I am obliged to pass inshore of the depôt as the President wishes to have water carriage to it from Madras *vid* the East Coast Canal.

3. The work is in progress by famine coolies.

4. The drain passes water from Veysaurpady, &c., across the road from Washermanpetta to Manaly through a sluice; in May last it also breached the road. I have therefore provided for cutting the road down below ground level and remetalling it to that height with a slope of 1 in 30 on each side of a flat length of 150 feet; the drain crosses the Trivatur and Ponery road two miles further north. I have provided a similar sluice* and slope in it for the passage of water as fast as the tide and flood below it will allow.

* But with self-acting shutters.

5. The sluice plan was returned with your No. 2,129 of 2nd instant. I beg to observe that stone can be procured only at a great distance from Trivatur, and it was for this reason that I proposed to build lengths of wood half feet high and one-and-a-

half feet thick into the face wall immediately above the crown of the arches from which to suspend by bolts and nuts the swing shutters; the outer edge of the beam would be so laid as to prevent the shutter from striking the floor, as it would lie along the projecting wall. I would also remark that the shutter can never close with violence as it must fall with a very gradual decrease of drainage.

6. The cost of work as proposed by you is Rupees 80 greater than as proposed by me.

7. Between Manaly and Trivatur bridges the President, Municipal Commission, has made the embankment into a road capable of carrying carts to and from the sewage depôt to the villages west and north-west of Madras. The additional cost of this work is entered in item No. 2.

8. The drain is nearly cut to Trivatur road. I solicit permission to begin the sluice, as even the showers of rain now falling will add to the cost of baling, and the whole project is useless and dangerous till the sluice is in working order.

9. The wall marked A is intended to show the elevation of the return, agreeably to a system of draining, which I have frequently complained of, but which appears very common.

P.S.—Since writing the above I have found that an extraordinary mistake has been made in taking the flood-level, to which no fall was given in some miles, and standard entered incorrectly before; the difference between M.S.L. and sill of lock has been a large source of confusion, which I hope I have put an end to.

No. 311. ORDER THEREON, 31st August 1877, No. 674 W.

HIS GRACE the Governor in Council sanctions the estimate of Rupees 11,170 for the drainage of the land between the village of Veysaurpady and the west bank of Cochrane's canal. The work, it is remarked, has for some time past been in course of execution as a Famine Relief Work.

Heads of Service.—Provincial.
Fund.—Ordinary.
Class.—Original Works.
Main-head.—(3), Miscellaneous Public Improvement.
Sub-head.—A, Inland Improvement.
Section.—iii, Drainage.
Work.—Drainage of land between Veysaurpady and Cochrane's canal.
Amount.—Rupees 11,170.
To be carried out by the Municipal and the Public Works Departments.

2. The Superintending Engineer will adopt the plan pointed out by the Chief Engineer for hanging the sluice shutters.

3. The sanction accorded in these Proceedings has been registered as Provincial No. 144 B of 1877-78.

(True Extract.)

Colonel, R.E.,
Secretary to Government, P.W.D.

To the Superintending Engineer, Chingleput.
" Examiner of Public Works Accounts.
" Revenue Department (Famine).

Exd. A. Grubert.
20 Spare Copies

5415/3

Rev 1877 Dept
Fr No 7494

5415

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1877} Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
CHINGLEPUT.
&c. &c. &c.

Dated August 31st.

Issued.

Recd. 7th September 1877 Encl.

G. O., 31st August 1877, No. 671 W.

AUGUST.

Nos. 310-311.

Mis 9012 September 1877 No 5415.

Comm 5th Rec 8th
Collr of Chingleput
8/9/77

Drainage of the land between the village of Veppampady and the West Bank of Cochrane's canal, Chingleput District.—Sanctions estimate of Rupees 11,170 for the —.

To the Board of Revenue
Collector of Madras