

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 2401

Press
Mis.

185. 186

Dated

7 - 9 - 1866.

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Revenue Department,
7th September 1866.*

No. 185. Read the following Proceedings of the Madras Government in the
Public Works Department:—

Passing orders on letter from Superintending
Engineer, 6th Division, relative to the delay } (Here enter 29th August 1866, No. 2,736.)
in the construction of the Vedarniem Canal. }

No. 186. ORDER THEREON, 7th September 1866, No. 2,401.

Separate Revenue, No. 7.

Salt.

Communicated to the Board of Revenue.

(True Extract.)

(Signed) J. GROSE,

Under Secretary to Government.

To the Board of Revenue, with Proceedings Public Works Department, No. 2,736.

Exd. S. T. Augustin.

*Proceedings of the Madras Government, Public Works Department,
29th August 1866.*

No. 653. Read the following letter from the Superintending Engineer, 6th Division, to the Secretary to Government, Department Public Works, dated Camp, Tritrapundi, 13th August 1866, No. 544:—

1. With reference to G. O. No. 2,365, dated 26th July, directing me to push on with the construction of the Vedarniem Canal in anticipation of an allotment of funds later in the year,
- 1 Enclosure. (To be returned.)

I have the honor to inform you that the delta is now one sheet of water. The channels which are to form the southern portion of the canal are full of water, and though work could be commenced on the northern section above high-water mark, it would not be prudent to excavate a ditch which would only fill during the north-east monsoon, while, if we attempted to excavate to the full depth of the channel, the percolation would now be excessive, and it is more than probable that the work would be arrested, and would have to be resumed under disadvantages in December or January next.

2. Until the receipt of the G. O. under reply I was not aware that there was any very great distress in the Tritrapundi Taluq. I immediately addressed the Tahsildar of Tritrapundi, and requested him to make it generally known throughout his Taluq that one thousand coolies per diem could be provided with employment at Tranquebar on the Salt works till the north-east monsoon commenced, and I shall be much surprised if two hundred coolies avail themselves of the offer of employment, and as the Range Officer complains that he cannot obtain labor for the works in progress within the range, the distress in Tritrapundi cannot be very great.

3. Pending the receipt of orders on my letter No. 65, nothing has been done towards the carrying out of the works provided for in the estimate of Rupees 64,000 sanctioned for the canal in G. O., No. 3,101, but the three under-tunnels
- 12th May.
- 19th October 1865.

for the Poyoor, Karoovalungudi, and Karapadugay channels. The two last have been completed. In the first, the wings are not completed, nor have the courses of laterite to weight the arch been laid. This work should have been completed long ago.

4. It was anticipated that the foundations of the Poyoor and Karoovalungudi tunnels would be laid without much trouble, but that baling, on account of percolation, in laying the foundations of the Karapadugay under-tunnel, would be very heavy; exactly the contrary proved to be the case, and there is a considerable excess in the estimates for the former, on account of baling; it will however, it is anticipated, be covered by savings on other portions of the estimate.

* Paragraph 10 of letter No. 960, 5th September 1865.

† 1 foot 10½ inches of masonry.

5. On the 7th instant the Chundra Nuddi was freshed, and the anticipations* that the syphon† sluice under the canal would not be able to bear the upward thrust of a column of from eight feet to nine feet of water, have, I regret to say, been realised. As soon as the water began to pass through the sluice, there were indications that water was bubbling up through the arch into the canal; of the extent of the injury

I am unable to inform you, but this is of little importance as there could have been no doubt from the first what must inevitably have been the result of attempting to make 1 foot 10½ inches of masonry resist a thrust of a column of water of from seven feet to nine feet. The front wall of the basin of the syphon-sluice, which is on a level with the bed of the Chundra Nuddi, is twelve feet above the floor of the sluice, or seven feet above the intrados of the arch, and during floods the depth of water in the Chundra Nuddi would probably exceed that in the canal.

6. As I informed you in person in March or April 1865, the Chundra Nuddi should not, in my opinion, have been passed under the canal. The level of its bed at the point where it crosses the canal is 5 feet 1½ inches above the proposed bed of the canal, while the tidal high-water is 4½ feet above the same point; the bed of the Chundra Nuddi is therefore 7½ inches above tidal high-water, and, in my opinion, while an under-tunnel was provided for the supply of the 60 vaylies of land irrigated by the Chundra Nuddi east of the canal, the bulk of its waters during floods should have been allowed to escape by the canal to the Velliyaur, instead of joining the canal near the junction of the latter with the Velliyaur.

7. In order to take advantage, as much as possible, of the work executed, I would suggest that two arches should be turned, as shown in the enclosed section, that the arches should be loaded with three layers of laterite, and that the Chundra Nuddi should be diverted into the canal, a wall or dam being raised across the Chundra Nuddi to the level of the bed just below the diversion of the stream to the under-tunnel. Dam stones should be supplied on this wall to retain water for the lands on the east of the canal in times of scarcity, while the wall being 7½ inches above tidal high-water mark, would prevent salt water from backing up the Chundra Nuddi and finding its way through the syphon-sluice to the detriment of the lands on the east of the canal.

8. The wall would, in point of fact, act the part of a surplus calingulah for the Chundra Nuddi, and liable as the stream is to heavy floods during the north-east monsoon, when the fall of rain near the coast is often considerable, it would not be safe to endeavour to pass its waters through the under-tunnel without a surplus or escape above, for the waters would be arrested by the under-tunnel, the basin of which was only 18 feet by 6 feet, and would back up till they breached the bank above.

9. The east wings of the syphon-sluice for the Chundra Nuddi, and the west wings of the syphon-sluice of the Keela-karapudugay have settled, and will probably have to be rebuilt. This is owing to false economy on the part of the designer, who gave the wings a depth of foundation of only four feet, while the under-tunnel was laid at a depth of 12 feet, the wings adjacent to the tunnels were, therefore, built on new earth, for the excavation for the foundations for the tunnel could not have been made without some slope in a depth of 12 feet.

10. The two under-tunnels for the Maila and Keela-karapudugay channels are only divided by a 1½ foot wall, and it will be impossible to keep the two streams

separate. The central wall both above and below the canal, and the wing-walls which have cracked, are not long enough, and will have to be extended.

11. The following are the works now proposed, and their probable cost is entered opposite to them; and I would solicit orders as to whether estimates should be submitted for them, or whether Government would wish any other plan to be adopted:—

Alteration and re-construction of syphon-sluice of	rs.
Chundra Nuddi	3,650
Constructing of dam or retaining wall across new cut	1,060
Diverting Chundra Nuddi	450
Land for diversion	450
	5,610

Re-building and extending wings and wall of separation between Keela and Maila-karapudugay, and forming a recess to receive extremity of bank... 800

The last work might be postponed till complaints on the subject are received from the villagers, or the two under-tunnels may be regarded as one, and the channels be separated after they cross the canal.

12. The excavation of the northern section of the canal may probably be commenced in December, and of the southern section in February; and a special Executive Officer should be appointed to superintend the work. At present there is no body available for the work in the District.

13. In paragraph 20 of my report dated 5th September, I pointed out that the width allowed for the canal was insufficient to admit of two boats passing each other at low-water; this difficulty will be considerably increased if the canal is not kept well cleared; and after careful consideration of the subject, I am still of opinion that a small dredge should be provided to clear the channel, and I deem it right to reiterate my opinion as, I regret to find, it differs from that expressed by Government in paragraphs 7 of G. O. No. 3,799.

No. 654. ORDER THEREON, 29th August 1866, No. 2,736.

CIVIL WORKS, No. 95.

1. As the Vedarniem Canal is of so much importance in connection with the Salt Revenue the Government regret to learn that its construction cannot be pushed on with until later in the year.

2. The Government approve of Captain Oakes' proposals for altering the design of the Chundra Nuddi under-tunnel, so as to convey by it only so much water under the canal as may be required for cultivation, and to divert the rest by a cut, and they sanction the estimates for the work, amounting to Rupees 5,610, as also the estimate for re-building and extending the wall separating the Keela and Melakarapudugay Channels, amounting to Rupees 800. The estimate for the canal sanctioned in G. O., No. 3,101, dated the 19th October 1865, for Rupees 64,000 will be increased by the aggregate of these sums, and will now stand at Rupees 70,410.

*Proceedings of the Madras Government, Public Works Department,
29th August 1866.*

3. The Government regret that they have no dredge at their disposal for employment in the Vedarniem Canal.

4. No Officer can be spared for the superintendence of the work, but a qualified Subordinate will, if possible, be detailed for it.

(True Extract.)



Colonel, R. E.,

Secretary to Government.

To the Superintending Engineer, 6th Division, with one Enclosure.

„ Revenue Department.

„ Controller of Public Works Accounts.

„ Accountant General.

Exd. S. T. Augustin.

No. 1148449

Aug 16/86

Rev = 1866. Depant
No. of 1st Depant 1894

Proceedings of the
Brotherhood of the
the S. M. Depant

Printed 29th Aug.
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88-2736

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Printing order on
letter from Aug 1894 6th
Rev. relative to the de-
lay in the execution
of the Victorian Council
of the 1894/95

14 Copy sent to the Rev. Mr. 1894/95

13

88-2401

Could be the 18th of Dec.

1894/95

1894/95