

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	3052	Press
	<i>1162-1143</i>	~~Mis.~~
Dated	18	18 65.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
18th December 1865.*

No. 142. Read the following Proceedings of the Board of Revenue :—

Recommending the immediate construction of an }
under-sluice in the Weyacandan channel in } (Here enter 13th December 1865, No. 7,980.)
Trichinopoly District.

No. 143. ORDER THEREON, 18th December 1865, No. 3,052.

Miscellaneous.

Ordered to be recorded.

(True Extract.)

(Signed) J. GROSE,

Acting Under Secretary to Government.

To the Board of Revenue.

Exd. S. T. Augustin.

No. 7,980.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 13th December 1865.

Read the following letter from A. R. McDONELL, Esq., Collector of Trichinopoly, to R. A. DALYELL, Esq., Acting Secretary to the Board of Revenue, dated 27th November 1865, No. 257 :—

1. I do myself the honor to forward, for approval and sanction, the accompanying estimate* for constructing an under-sluice in the Weyacandan channel. I at the same time enclose the plans illustrative of the work, together with the previous correspondence on the subject.

* Rupees 16,500.

2. The Board are aware that there is a very large amount of revenue† dependant on this channel, the want of this sluice has been felt, the masonry dam which stands on the site where this sluice will be constructed has now by experience been found to cause the channel to silt up, and we have had the greatest difficulty at times, when the water in the river is low, to pass any water down the channel. Our revenue will be in jeopardy if the work is not soon carried out: each year's experience shows the absolute necessity of the work for the protection of existing revenue.

† Rupees 1,17,000.

3. The correspondence will show the Board the necessity there is for not losing the present working season.

4. Under these circumstances, I do not hesitate to act on Captain Oakes's suggestion to urge upon the Board the necessity of soliciting the sanction of Government for a special grant of 10,000 Rupees to commence the work in December or January next. There are no funds from the allotment of 1865-66, which can be made available in the Division for this work.

ENCLOSURE No. 1.

From Captain R. F. OAKES, R. E., Acting Superintending Engineer, Sixth Division, to A. R. McDONELL, Esq., Collector of Trichinopoly, dated Tanjore, 4th November 1865, No. 1,298.

1. With reference to your letter, No. 48, dated 6th April, I have the honor to inform you that the investigation of the causes of the defects in the Wyacondan channel had been already commenced by Colonel Greenaway when I succeeded to the charge of the Sixth Division, and the matter was therefore left in his hands. His report on the subject reached me too late to admit of the work proposed by him being undertaken last season, and I postponed forwarding it to you, as I hoped to be able to visit the channel myself; but this I have not been able to do.

Enclosures, 4.

No. 491, dated 18th July 1865.

2. The work proposed should appear in the Budget of 1866-67. I therefore forward the plan and estimate of the powerful under-sluices (in lieu of the ruined dam to which you refer in paragraph 3,) which Colonel Greenaway proposes to provide, and which he is of opinion will remedy the main defect at the channel-head, viz., the accumulation of a large quantity of silt, which now has no means of escape except through the head sluice of the channel. With regard to all other defects, Colonel Greenaway speaks lightly, and the petty works which may be required are within the sanction of the local Officers; but the regulation of the surplus sluices is an important point, and this appears to be systematically neglected.

Rupees 16,500.

2. I quite agree with Colonel Greenaway in his remarks regarding the points adverted to by Mr. Puckle in his letter, No. 163, dated 30th December, and I have not the slightest objection to the Revenue Department undertaking the care of the Padugay and the planting of brush-wood and Nanal for the formation of Corumboos.

3. As the estimate exceeds Rupees 10,000, it must receive the approval of the Revenue Board before it is submitted to Government, and to save time I would suggest that the Board should be requested to forward it to Government with their approval without returning it to the District.

4. As you are aware, if the estimate is entered in the Budget of 1866-67 the work cannot be commenced till early in 1867; for it is out of the question commencing such a work after the 1st May; if therefore you regard the early commencement of the work as of importance you might urge upon the Board the necessity of soliciting the sanction of Government for a special grant of Rupees 10,000 to commence the work in December or January next; but in doing so I beg you will state that no funds from the allotment of 1865-66 can be made available in the Division for this work.

Enclosures.

Original letter from Colonel Greenaway, No. 491, dated 18th July.
Plan of under-sludge and survey.
Abstract estimate.

(True Copy.)

(Signed) Æ. R. McDONELL,
Collector.

Enclosure No. 2.

From Lieutenant-Colonel T. GREENAWAY, Executive Engineer, Trichinopoly, to Captain R. F. OAKES, R. E., Superintending Engineer, Sixth Division, Tanjore, dated 18th July 1865, No. 491.

1. I have the honor to return letter No. 48, of 6th April 1865, from the Collector of Trichinopoly, with its enclosures, and to submit a few remarks on the state of the Weyacundan channel, made after careful inspection, with proposals for its improvement.

2. The complaints referred to by the Collector though somewhat exaggerated are, I regret to say, founded on fact; the present state of the channel being unsatisfactory and likely to become worse.

3. The channel, as far as it need be discussed in the present memoir, is thirty-eight miles long. Its continuation beyond that limit need not be now alluded to. A scheme for its completion, restoration, and improvement being already on record, which, with the exception of a little revision of rates, requires nothing to make it thoroughly suitable to all requirements.

4. The channel is furnished with a masonry head sluice of very solid construction, affording 27½ linear feet of waterway, and placed near the village of Pettavothally, about three miles below the true head of the channel where the Corumboo is constructed.

5. There are at present four sand pokes, or relieving cuts, between the Corumboo and the head sluice leading from the channel back to the river. The easternmost of which has been closed by the construction of a masonry calingulah, this work is close-by the head sluice, and is the one complained of by the ryots.

6. The channel has silted up to such an extent that there is a depth of five feet of deposit on the sill of the head sluice.

7. The average fall in the channel, for the thirty-eight miles under consideration, is 7.1 inch per mile. Its section for the first twelve miles averages 309 square-feet, with the water at surface level, that is, at the height at which it suffices for requirements, and which is attained when the water above the head sluice is eleven feet above the sill, and all vents are open, but without any auxiliary supply from the streams that run into it.

8. The discharge at present at the said level, and dependent on the river supply only, is estimated at 45,732 cubic feet per minute, or 1,02,897 cubic yards per hour, at the head sluice and upper part of the channel. This is calculated from the section, hydraulic mean depth, and fall at Gopoo, and from the observed head at the head sluice, the results in both cases tallying very well.

9. It must not be forgotten that the channel receives irregular supplies and sometimes very heavy floods from the smaller rivers that run into it; but this source of supply is not taken into account in the present report.

10. The irrigated area under the channel is estimated as 19,288 Karis.

11. There are five escape calingulahs and three scouring vents, or under sluices, within the said thirty eight miles, the calingulahs serving to discharge surplus floods and save the banks, the under-sluides having been intended to scour out the channel bed; but as they are never worked, the said bed is very much, though irregularly, silted up throughout its whole length.

12. It will be observed from the standard and relative levels forwarded, that the sill of the head sluice must have been fixed at a time when the bed of the Cauvery itself, as well as of the channel, was deeper than at present, and as (the same quantity of water coming down) the surface level of the flood must have risen in relative proportion, as is further shown by the necessity for raising the river banks, experienced of late years, it is not considered necessary to require the removal of the whole of this five-foot bed of silt, but only for its removal to such a depth as will still keep up a sufficient difference between the bed of the channel and the bed of the river as to secure a scour.

13. It will also be observed, however, that the crest of the present calingulah is no less than eight and half feet higher than the sill of the sluice, and although the floor of the two tamboghies subsequently made in its body are only three feet above the sill of the sluice, they have not been able to affect anything in the way of scour; because when there is but little water in the channel, the Ryots of course require them closed; while when there is plenty of water, and they might act efficiently, they cannot be got at to be worked.

14. Of the remaining three sand pokes, the two westernmost have so little fall that they are useless for scour, and only waste water in low freshes.

15. The third has a fall of 2' 2" in a length of 550 feet, and palpably has some effect in keeping clear the channel above it. The system of relief by sand pokes, closed with little bunda when the water is low, is a most barbarous and inefficient one; wastes much water; and effects, comparatively; little good.

16. With a view to improving this upper portion of the channel, I would propose removing the present calingulah, which is in a dilapidated condition, and constructing a range of under-sluides of sufficient capacity to keep up an effectual scour along the sole of the channel; while at the same time economizing the water to the greatest extent possible.

17. I have the honor to forward an estimate, with plans and specification, for a work of the kind, together with a plan for working the shutters in such way as to discharge the surplus water at the bottom instead of at the top of the escape, and with facilities for opening or closing them, at any period or state of the flood, without risk and with much less labour and cost than the ordinary plan.

18. With regard to the lower portions of the channel, I believe the sole evil to be remedied is the silt, and this I am convinced could be very greatly reduced, if not wholly got rid of, by working the existing under-sluides.

19. The reasons why these have hitherto been systematically neglected are two; first, that the Ryots grudge what they imagine to be a waste of water; secondly, the great labour of working the bank shutters, with which they are furnished, under a head sometimes of twelve feet of water.

20. With regard to the first, it would be as well to make them understand that it is wished to work the under-sluices to such an extent as is consistent with not lowering the water below service level, i. e., the crest of the escape calingulah and this being admitted, it can make difference as to waste that the water which would go over the calingulah should be got rid of under it. I have already brought this to the notice of the Collector.

21. For the second, laziness must bear the blame, though it would be a great assistance doubt, to alter the style of shutters to one more easily worked, as the rotating shutter, where vents are large, or the hatch shutter, with ratchet and pinion, where they are small.

22. The escape-calingulahs and under-sluices are mostly in very good order, and some of them are really splendid works; a few trifling alterations would improve some of them, which present are unprovided with any tambooghies, or means of working them. Estimates for such alterations to Pulivalem and Nat Royen calingulahs are herewith submitted.

23. With regard to the suggestions made by Mr. Puckle, the Tahsildar, and others, I will beg to remark.

(1.) That the conservancy of the Padagays is ineffective, and would, I believe, be better managed by the Revenue authorities, or still better, by being made a matter of Village Police and the Munsiffs held responsible for it within their own limits. Our Overseers cannot spare time, from more emergent duties, to look after Padagays, and I am convinced that our system is a failure, no man now-a-days would undertake the work at the rates we pay unless he made nominal thing of it, and devoted his time to other pursuits, or else found means of making profit by it above his salary.

(2.) The Corumboos and channel-heads are already under the control of the Civil authorities; such work can only be done by a levy *en masse* of the laboring population, as has been the custom in India time out of mind. The work is but a light tax on the agriculturists, who benefit enormously by it, and any attempt to make a paid labour affair of it, or do it on estimate would involve immense outlay, with probably no better work. Taking Corumboos for what they are, a rough and ready, somewhat uncivilized expedient, I think they are really very well managed by the people.

(3.) Sand pokes, I have already mentioned, I would at once propose to close the two western ones, and the third as soon as the under-sluices have been constructed.

(4.) I agree that the duty of planting the banks has been too much neglected.

(5.) I object to the maintenance of small working parties, Corumboo and channel-head clearance work cannot be done in scraps.

(6.) It is no use cutting down calingulahs; they and under-sluices are each excellent for their own special purposes, and, in channels like the Weyacandan, should always be combined the first to get rid of dangerous floods, the second to scour the beds.

24. Up to this time, the management of the head and under-sluices, calingulahs, &c., has been entirely in the hands of the Tahsildars, probably under the idea that the regulation of water in the fields according to requirement was best attended to by those who had the Ayaout by her and were deeply interested in the Revenue. I have no fault to find with the arrangement, provided the purposes for which the different works were provided be recognized; but if the Tahsildars do not understand the use, or will not attend to the management of those works which have been constructed for securing the general efficiency of the channel, the charge of the said works should be vested in this Department as in the Godavery.

25. In conclusion, I beg to observe that the clearing out of the channel bed, without adopting any means to prevent its re-accumulation, would be only an enormous expense for a momentary advantage; while the adoption of the means proposed to prevent silt will in themselves be highly efficacious in removing it.

26. It will be observed that during the ordinary high freshes the supply, as aforesaid, is more than adequate to the demand; which is also the case when the jungle streams are in flood; but these are only of occasional occurrence, and it is during the low freshes that the silting up of the channel operates so detrimentally.

ENCLOSURES Nos. 3, 4 and 5. — Estimate and two Plans.

Recommended for immediate execution, and forwarded direct to the Secretary to Government, Department Public Works, as requested by the Superintending Engineer.

(True Copies and Extract.)

Secretary.

To Colonel C. A. Orr, R. E., Secretary to Government, P. W. D.,
with estimate and two plans.

„ J. D. Sim, Esq., Secretary to Government, R. D.

„ A. R. McDonell, Esq., Collector of Trichinopoly,
with original letter returned.

Exd. R. H. Leo.

1885

Department

Wm. J. [illegible]

No. 3685

PROCEEDINGS OF THE BOARD OF REVENUE

Dated 13th December 1885

Decd 13-85

Ca. 160

No. 7,980

14th Dec 1885

Recommending the immediate construction of
an under-sluice in the Weyacunda channel in
Richinopoly district.

RECOMMENDATION

1885 Dec 13-1885