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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.G.O. No. 2648

Press

Mis.

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*Proceedings of the Madras Government, Public Works Department,
4th November 1862.*

No. 85. Read the following letter from W. HUDLESTON, Esq., Secretary to the Board of Revenue, to Colonel W. L. BIRDWOOD, R. E., Secretary to Government, Department Public Works, dated Madras, 11th October 1862, No. 6,835 :—

SIR,

1. With reference to the Govt

Order dated 21st May 1862, No. 1,106, Public Works Department, Public, I am

- From Collector of Ganjam, dated 18th June 1862, No. 571.
 " Acting Collector of Vizagapatam, dated 2nd July 1862, No. 138.
 " Collector of the Godavari District, dated 7th August 1862, No. 169.
 " Collector of the Krishna District, dated 26th July 1862, No. 181.
 " Sub-Collector in charge of Nellore, dated 30th July 1862, No. 181.
 " Collector of Cuddapah, dated 6th June 1862, No. 121.
 " Collector of Bellary, dated 2nd August 1862, No. 121.
 " Collector of Kurnool, dated 17th July 1862, No. 74.
 " Collector of Madras, dated 7th July 1862, No. 233.
 " Collector of North Arcot, dated 23rd July 1862, No. 147.
 " Collector of South Arcot, dated 2nd August 1862, No. 150.
 " Acting Collector of Tanjore, dated 15th July 1862, No. 256.
 " Collector of Trichinopoly, dated 14th July 1862, No. 127.
 " Collector of Madurai, dated 23rd July 1862, No. 143.
 " Collector of Tinnevely, dated 18th July 1862, No. 204.
 " Collector of Coimbatore, dated 19th July 1862, No. 148.
 " Collector of Salem, dated 18th July 1862, No. 463.
 " Collector of South Canara, dated 24th July 1862, No. 69.
 " Collector of Malabar, dated 26th June 1862, No. 131.

directed by the Board to submit for the information of Government the papers noted in the margin, and to report their opinion on the arrangements necessary and proper to give effect to the instructions of the Home Government, relative to the re-transfer to the Revenue Department of a portion of the Maramut work of the Presidency.

2. The Board deem it very necessary to bring prominently to notice in the first place the very considerable changes that have taken place in the circumstances of the Districts since the Revenue authorities were formerly relieved of this charge, and even since those Minutes by the Members of Government, on which the Secretary of State has in great measure acted were, recorded.

3. The charges of Tahsildars have been very largely increased, by the amalgamation of Taluqs. The Huzur and Taluq Revenue establishments have been reduced to the minimum of strength at all compatible with efficiency. The duties of all Magisterial Officers, including Collectors, and Tahsildars, have been rendered immensely more onerous by the passing of the Penal and Criminal Procedure Codes.

4. The Revenue Code now before the Legislative Council will add still more to the duties of Tahsildars in their Judicial capacity.

5. On the other hand, works of Irrigation and Communication have been considerably developed in the last few years, so that the charge to be re-transferred is a more extended one than that of which the Revenue Department was formerly relieved.

6. While recognizing these difficulties in the way of the proposed change, the Board have carefully considered the best mode of giving it effect.

7. They consider that, except where skilled labor and superintendence are necessary, the execution of what has been designed and estimated for by the Engineer's Department should be entrusted to the Revenue Department. They would therefore propose,

First.—That the maintenance of all existing works of irrigation and local communication be transferred to the Revenue Department, except as regards the repair or renewal of masonry works, estimated to cost more than Rupees 1,000;

Second.—That the execution of all new earth works for purposes of irrigation or communication be entrusted to the same Department, together with the execution of new masonry works connected with them and estimated to cost not more than Rupees 1,000;

Third.—That repairs to revenue buildings within the same limit be similarly entrusted.

8. The Board presume that all estimates for works of importance or magnitude will be prepared in the Engineer's Department, and that all work executed by the Revenue Department

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will be supervised and tested by the Department Public Works, and they infer from paragraph 8 of the Despatch of the Secretary of State that a certain number of skilled agents will be placed at the Collector's disposal.

9. Assuming these preliminaries, the Board will sketch out the following scheme of operations.

10. It should be a ruling principle, from which no advances whatever shall be made for work, and that recourse shall be had to the contract system to the widest possible extent.

11. The Board are fully convinced of the feasibility of the first proposal from the fact that within the last two and half years in the Salem District nearly five lacs of Rupees have been expended on Public and Local Fund works, without an Anna of advance for any purpose whatever, and it is moreover notorious that the Railway works have been carried out on the same system. Unless this principle be insisted on and maintained in practice, the more prominent evils which attended the early system, and which led to its abandonment in favor of that which it is now proposed to modify will infallibly be revived in greater force than ever.

12. As to the second proposal, the Board rely greatly on the combined agency of the villagers who are interested in any work, and who in fact command when they do not themselves compose the local available supply of labor, for its speedy, and economical execution.

13. They fully believe that in a very short time, when the villagers learn to appreciate the advantages of the joint contract system in combination with a method of payment which shall secure them from extortion, although the nominal rates for work may appear somewhat higher than what formerly ruled, the real cost to the State will be less, from the saving effected in the item of "Irrecoverable advances."

14. Payment must be made frequently, and other parties will be thereby induced to take up contracts for work.

15. The Board would propose weekly payments for work performed and measured, the payment to be by means of a Cheque either on the Taluq Treasury, or the village officer in collecting the revenue, in favor of the Contractor, or of the Taluq Sub-Overseer when the work is performed by day laborers, or in the more extensive works, to be made by the Assistant Engineer working under the Collector, and if found practicable by means of the ticket system.

16. The Establishments, which the Board would propose are as follows:—
For Districts such as Canara and Malabar where there are no artificial irrigation works, or as Ganjam and Vizagapatam where Zamindaris form a large portion of the area concerned smaller Establishments will suffice.

COLLECTOR'S KACHERI.

1 Head Clerk and Accountant...	70
1 Accountant	35
1 Do.	20
1 Vernacular Clerk	35
1 Do.	15
2 Attenders at Rupees 7	14
1 Maramut Overseer Rupees	70
Travelling allowance for do.	30
1 Lascar for do.	100
9	7
	296

SUB-COLLECTOR'S KACHERI.

1 Clerk and Accountant	20
1 Gumashta	15
1 Attender	7
3	42

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HEAD ASSISTANT'S KACHERI.

1 Clerk	20	20
DEPUTY COLLECTOR'S KACHERI.		
1 Clerk	20	20
		378

TALUQ ESTABLISHMENT.

1st Class Taluq.

1 1st Class Sub-Overseer, Rupees	50	
Travelling allowance....	30	80
1 Gumáshta attached to him....		10
1 2nd Class Sub-Overseer, Rupees	30	
Travelling allowance....	30	60
1 Gumáshta..		10
IN TAHSILDAR'S KACHERI.		
1 Clerk...		20
1 Do.		15
6 Lascars to be employed in the Taluq at 6 Rupees....		36
		231

2nd Class Taluq.

1 1st Class Sub-Overseer as above...	80
1 (His) Gumáshta... ..	10
TAHSILDAR'S KACHERI.	
1 Clerk... ..	20
1 Do... ..	15
4 Lascars at 6 Rupees	24
	149

17. The Board contemplate that every Officer in distinct revenue charge of a portion of a District will, as a matter of course, have the Maramut charge also, so that the returns, &c., from the Taluqs will reach the Collector through him, and he will have the immediate control and responsibility of the charge.

18. The Collector would primarily look to him to see that nothing is left undone that is needed. His local acquaintance with the requirements of his charge, and his influence with the villagers should render his co-operation most effective and valuable.

19. The following scheme for the conduct of operations on the change of system has been sketched by Captain Gahagan, the District Engineer of Salem, who has been most successful in abolishing the evil of advances in actual operations. It appears to the Board well adapted for the purpose and they would advocate its adoption.

20. Each Sub-Overseer in charge of a Taluq or portion of a Taluq will, on the 20th of each month send the Tahsildar a Memorandum of the amount required to cover the expenditure of the coming month, from which the Tahsildar will prepare an estimate for the whole Taluq and forward it by the 25th of Kymart to the Collector, who will return it with his endorsement sanctioning the amount. Disbursements out of the sanctioned amount will be made by the Tahsildar by means of Cheques on the Taluq Treasury of which he will keep a register.

21. The Sub-Overseers will obtain funds once in every seven days from the Tahsildar by means of cheques issued by the latter in the Sub-Overseer's favor.

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22. On no account should any Tálug Sub-Overseer be entrusted at one time with Cheques to the amount of more than Rupees 300.

23. Payments for work done on contract and exceeding Rupees 50 in cost shall be made invariably by Cheques made directly payable to the Contractor concerned, and in no case shall the Tahsildár issue a Cheque of this kind, until a bill of measurements in detail and quantities has been submitted to him by the Contractor and signed by him. Should any entry in a bill appear to the Tahsildár of a questionable nature, he shall lose no time in taking the opinion of the nearest Officer or Subordinate of the Department of Public Works, who shall, if necessary, test the accuracy of the bill by proceeding to the work and measuring it. When the Tahsildár is satisfied with a bill he shall issue a Cheque in favor of the Contractor concerned to the Tálug Sub-Overseer, returning at the same time with his initials affixed to the original bill.

24. Every Sub-Overseer in charge of a Tálug or portion of a Tálug will keep two Cash Books, one for *Public* and the other for *Local Fund* expenditure.

25. The Tahsildár shall inspect the Cash Books and Cash Chest of the Tálug Overseers at least once in each month, either personally or by deputing the Tálug Serishtadár or a Sub-Magistrate to make the inspection, and the inspecting Officer shall on each occasion note the date of inspection on the Cash Books.

26. The Tálug Sub-Overseers in charge of a Tálug or portion of a Tálug shall, on 1st of each month, submit to the Tahsildár without fail, the following Returns for the previous month:—

1. Account Current.
2. Progress Report.
3. Nominal Roll of Extra Establishment.
4. List of works completed during the month, and shall forward with them all the Bills

NOTE.—It was suggested that these Returns should include a List of Tools, but the Board are decidedly of opinion that all laborers under the Tálug Overseers should be required to provide their own tools.

passed by the Tahsildár for the contract work included in the month's accounts, and all the Station Books kept for works not done by contract and every other description of voucher and receipt

which may have been given to him during the month.

27. On receiving the Sub-Overseer's accounts the Tahsildár will take particular care to see (1) that the aggregate value of the Bills and Station Books sent in corresponds exactly with the aggregate expenditure shown in the Account Current and Progress Report; (2), that the exact state at the end of the month of each work in progress, as well as the quantity of work done

during the month is clearly given in the Progress Report; (3), that every column in the several Returns is duly filled up; (4), that no extra establishment has been employed without his own sanction; and (5), that the returns are free from all clerical errors and errors of calculation.

* The bare entry "In Progress" of which Subordinates are so fond must be inadmissible under any circumstances. The entry "No expenditure during the month" should be accompanied by a brief note of the cause of the absence of expenditure.

28. After examining the Sub-Overseer's accounts and vouchers the Tahsildár shall send them on by the 5th of each month, at latest,† with his counter-signature to the Collector. Any remarks which the Tahsildár has to make on the expenditure or the progress of works should appear in the shape of a foot note on the return to which the vouchers specially refer.

29. The Tahsildár shall have no authority under any circumstances to sanction an advance of money for any purpose connected with Public or Local Fund works.

30. Every Tahsildár will have two Maramut Gumishtas to assist him in correspondence and in the examination of accounts, but they are on no account to be employed in the preparation of estimates or in the supervision of out-door work.

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31. Month by month the Collector shall forward to the District Engineer all the measurements and bills received from the Tahsildárs, and the District Engineer shall return the same to the Collector within three months from the date on which he receives them, with a Memorandum showing for each work estimated at more than 100 Rupees the date of inspection by an Officer of the Department Public Works with the Officer's remarks as to the quality and cost of the work.

32. A monthly Memorandum of inspections in the accompanying form* would perhaps be the most convenient arrangement.

33. On or before the 15th of each month the Collector shall send to the Controller of Public Works Accounts at Madras the following returns for the previous month:—

1. Account Current.
2. Progress Report.
3. Statement of Unadjusted Expenditure to accompany the Account Current.
4. Statement to accompany the Progress Report.

34. The Collector shall also at the same time send a duplicate of his Progress Report to the Superintending Engineer of the Circle.

35. The forms of (bill on completion or at the end of the year for works between 50 Rupees and 2,000 Rupees, half yearly for works under 50 Rupees, and quarterly for works above 2,000 Rupees) at present used by the Department Public Works, shall be adhered to by the Collector.

36. The final bill for every work above 100 Rupees shall contain a completion report and a certificate in the prescribed form from some Officer in the Department Public Works.

37. The Board trust that it will not be found necessary to require any accounts in addition to those above indicated. It is under the burden of the account system that the present Department Public Works has failed to give entire satisfaction.

38. Should Government be disposed to try the altered system in only a few Districts at first, the Board would suggest that Tanjore, Salem, and Kurnool be selected for this purpose.

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ENCLOSURE A.

CIRCLE D. P. W.

DISTRICT.

List of Inspections made by Captain during the month of 186 .

Tábuq.	Name of work and amount of Estimate.	Date of receipt from Collector of Tábuq Bills.	Date of Inspection.	Remarks.
	Tank. Estimate Rupees 500.....	10th May.....	28th May	Work measured and quantities given in Tábuq Bills correct.
	Anicut. Estimate Rupees 800.....	Do.	31st May.....	Work completed, measurement correct, and in accordance with sanctioned estimate. A certificate will be sent in to the Board in a few days.

Station
Date,

N. B.—Herewith are returned in separate wrappers all the Bills and measurements received from the Collector for the works above named.
(Signed) A. B.
District Engineer of

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No. 86.

ORDER THEREON, 4th November 1862, No. 2,648.

1. Communicated to the Chief Engineer, who is requested to convene a Committee, composed of himself, the Deputy Chief Engineers Northern, Southern and Central Circles, and any of the other Engineer Officers at the Presidency, with a view of reporting upon the following points:—

- (1.) On the recommendations contained in the Board's letter recorded above.
- (2.) On the system under which Public Works other than those to be undertaken by the Revenue authorities, are for the future to be carried out.
- (3.) The establishments, Executive and Office, including those mentioned by the Board of Revenue, which will be required under the proposed system.
- (4.) The probable reductions under all heads, in the item of establishments.
- (5.) The arrangements to be made for transferring to the Revenue authorities such portion of the present establishment as the Board represent to be required.
- (6.) The number of Officers and Subordinates, Executive and Office, who are likely to suffer by the proposed arrangements.
- (7.) The number and nature of the returns and accounts sent in by District Engineers which can be dispensed with or simplified.
- (8.) The changes to be introduced in the working of the Audit Department with reference to paragraph 14 of the Despatch from the Secretary of State communicated in the Proceedings of Government No. 1,106, dated 21st May 1862.

2. The Report should be prepared and submitted to Government with all practicable expedition.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

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4th November 1862.

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District.

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Taluq.	Name of work and amount of Estimate.	Date of receipt from Collector of Taluq Bills.	Date of Inspection.	Remarks.
	Tank. Estimate Rupees 500.....	10th May.....	28th May.....	Work measured and quantities given in Taluq Bills correct.
	Anicut. Estimate Rupees 800.....	Do.	31st May.....	Work completed, measurement correct, and in accordance with sanctioned estimate. A certificate will be sent in a few days.

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- (3.) The establishments, Executive and Office, including those mentioned by the Board of Revenue, which will be required under the proposed system.
- (4.) The probable reductions under all heads, in the item of establishments.
- (5.) The arrangements to be made for transferring to the Revenue authorities such portion of the present establishment as the Board represent to be required.
- (6.) The number of Officers and Subordinates, Executive and Office, who are likely to suffer by the proposed arrangements.
- (7.) The number and nature of the returns and accounts sent in by District Engineers which can be dispensed with or simplified.
- (8.) The changes to be introduced in the working of the Audit Department with reference to paragraph 14 of the Despatch from the Secretary of State communicated in the Proceedings of Government No. 1,106, dated 21st May 1862.

2. The Report should be prepared and submitted to Government with all practicable expedition.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

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From G. S. FORBES, Esq., Collector of Ganjam, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Chatternoor, 18th June 1862, No. 112.

1. I have the honor to reply to the Board's Circular Order, Miscellaneous No. 8,410, dated 26th May last, calling for an opinion regarding the transfer of works of communication and irrigation of secondary importance to an executive agency to be detached from the present Establishment of the District Engineer, and employed under the Revenue Officers of the District.

2. The Order of Government circulated with the Board's Proceedings indicates three points for special consideration and report. The first of these relates to the class of works which shall devolve on the Collector and his subordinates. After discussing the subject with the District Engineer, Deputy Collector, and Head Serishtadar, I am of opinion that the Collector's charge of communications should be limited to village roads and such cross lines as may be made from local funds, and for local convenience, in distinction to all imperial lines of either first or second class.

3. All buildings estimated to cost more than 500 Rupees, should, I consider, be left to the Executive Engineer.

4. Works of irrigation should be divided into two classes, local and general, the former comprising the repairs of all tanks, and their accompanying necessary works to be undertaken by the Revenue Establishment; the latter, which would include river channels and anicuts to be under charge of the Executive Engineer. The construction of all large reservoirs to be also undertaken by the Executive Engineer.

5. In reference to the second point, which concerns the strength of the Establishment to be made over to Collectors, I enclose a tabular Statement showing the grades, names, and salaries of the persons whom I propose with the concurrence of the Executive Engineer to transfer; it will, however, be absolutely necessary to the success of the system now proposed, that not only should the services of the superior Officers of the Engineer's Department be rendered to the Collector for inspecting and measuring the works executed by the Revenue subordinates, but that the latter should during the wet season when tank work is impossible, be employed on the repairs of imperial lines of road, under the orders of the Executive Engineer, the details of such interchange of services being matter of arrangement between the Collector and District Engineer.

6. I now come to the third point which refers to account and audit. It seems to be admitted that existing accounts are too numerous, and that Central audit, though costly and laborious, is after all no efficient check on the misapplication of public money by subordinates.

7. As regards local arrangements I think a single sheet might be so drawn as to constitute a sufficient record of the progress of each individual work under the Collector, and of the items of expenditure* incurred on it. The estimate in detail would

* Supported by bills for Sundries.
occupy one column of the paper and the abstract of each week's expenditure* would be filled in weekly on an ample margin left for the purpose until the completion of the work, when the estimate and outlay would be balanced (after examination of the work) and signed by the Collector. Instead of sending these accounts for audit to the Central Office, I would call upon the Executive Engineer to check the details and furnish a certificate of their correctness which might be forwarded to the Central Officer, leaving it to the Superintending Engineer to call up and examine the account of any work which might seem to him to call for scrutiny. This plan is suggested by Captain Philipps in lieu of a more distant audit, and affords in my opinion sufficient security for the proper expenditure of public money.

8. The local accounts of which I have spoken would be rendered direct to my office by the subordinate executing the work; it would be impossible to throw this labor on the Tahsildars, who have under Mr. Pelly's arrangements more work already than they can efficiently get through.

but in their tours through the District, their attention would be given as far as possible to the requirements of minor irrigation works, and their remarks on those seen by them after execution regularly submitted to the Collector independent of the examination to be made by the higher subordinates of the Executive Engineer's Office. Little or no work is to be got out of Ooriya Ryots, who consider it very degrading to carry earth on the head.

9. I believe that with these modifications of the existing system, the Executive Engineer would be relieved of much petty detail, and that his accounts would cease to be found burdensome.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing names, &c., of persons proposed to be transferred from the Executive Department.

Exd. J. Tulloch.

From D. F. CARMICHAEL, Esq., Acting Collector of Vizagapatam, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated 2nd July 1862, No. 571.

1. I beg now to reply to Board's Circular, Miscellaneous No. 3,410, dated 26th ultimo, calling for report on three points specified by Government, with a view to giving effect to the re-organization of the Department Public Works.

2. The first point is the "exact extent and description of works to be placed under the Revenue Officers, and to define the class of tanks, channels, and communications which they consider to be represented by the term secondary."

3. In this District there are only two Government Taluks Palcondah and Nursipatam. Palcondah being rented we have only to provide for Nursipatam. In the Appendix A, I have set forth the nature of the irrigation works, whether tanks or channels. I would propose that all yielding a revenue of less than Rupees 2,000 a year be placed under the Collector, as "secondary," the rest to remain with the Department Public Works.

4. In regard to "Communications" I would recommend that all these be left with the Engineers; they are not at all in our way. As Revenue Officers, our prestige in securing the hearty co-operation of the Ryots, begins and ends with works of irrigation. In regard to buildings I would place all revenue and marine buildings such as Travellers' Bungalows, Sea Custom Houses and Light Houses under the Collector, who would perform all repairs up to one-fourth the value of the building.

5. The second requisition is to "submit tabular Statements showing the number and salaries both of the Executive Agency, which will be required to carry out the works so undertaken, and also of the Conservancy Establishments necessary to watch the irrigation works, and regulate the distribution of water to the lands."

This I do in Appendix B.

6. The third and last point is "to explain the method proposed to keep the accounts locally, and that on which these accounts are to be rendered to the Office as audit for public works."

The Executive Officer should submit to the Collector a monthly Progress report of all works; annexed to this should be an account current of receipts and disbursements. The Supervisors and Overseers to keep a diary, to be submitted with their Progress report. As each work is finished, a Bill to be submitted by the Officer of the range to the Collector, who is to be the sole and undivided authority in all works within his cognizance. In order to work this effectually I would propose that the Collector have authority to sanction all estimates for irrigation works within the Ayacut without reference to Madras.

The Collector, after checking the bills in his Srishta Department, will forward them to the Office of Audit, through the District Engineer for final sanction. The Srishta Department should be increased by one Gumastah on Rupees 30 and one English writer on 25 Rupees per mensem and the salary of the Srishtadar from Rupees 200 to 250. His labours will be considerably enlarged by the change.

7. Having thus answered the reference, I take leave to recommend that the District be no longer divided into three ranges (which is ridiculous where the extent of country is some 18,000 square miles) but into five; to have a Supervisor for the Nursipatam range, and European or East Indian Overseers for the other four ranges; to abolish the appointment of Assistant Engineer, which I believe was only created in expectation of barracks being built at Waltair. The cost of the Establishments of the existing three ranges is Rupees 18,168 per annum. I think efficient supervision for five ranges might be had for Rupees 16,956. A Comparative Statement is given in Appendix C. This Establishment I would use indiscriminately both in the Collector's and Engineer's Department, there being only one Taluk in which Government are called on to provide for irrigation works.

ENCLOSURE No. 1, A.

ABSTRACT.—Classified Statement of the irrigation works in the Nursipatam Taluk in the District of Vizagapatam.

ENCLOSURE No. 2, B.

ABSTRACT.—Statement showing the present and proposed Maramut Establishment for Nursipatam Taluk.

ENCLOSURE No. 3, C.

ABSTRACT.—Comparative Statement of the present and proposed Maramut Establishment for the District of Vizagapatam.

Exd. J. Tulloch.

From A. PURVIS, Esq., Collector of the Godavery District, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Rajahmundry, 7th August 1862, No. 138.

1. I have the honor to acknowledge the receipt of the Miscellaneous Circular, forwarding Proceedings of the Board of Revenue of the 26th May last, with the Order of Government passed on a despatch from the Secretary of State on the subject of the re-organization of the Department Public Works. I have also to acknowledge the receipt of the Proceedings of the Board of the 30th June, informing me in reply to a reference made by me that the exception made by the Secretary of State referred only to the Godavery and Kistna Deltas, and that a report was required from me for the irrigation works in that portion of the District above the Delta, and for the secondary roads, &c. in the entire District.

2. I would venture respectfully, but strongly, to urge that no change should be made in regard to the control and execution of works of whatever kind in the Delta. The great system of channels for irrigation and navigation connected with the anicut, it is decided is to remain under the immediate control of the officers of the Department Public Works. It will add greatly to the expenditure on account of establishment if the execution of repairs to buildings, improvements, and repair of District roads in the part of the District under notice, are to be entrusted to another Department. It is in my opinion very undesirable that two different authorities should be entrusted with the execution of works in the same tract of country. We shall have the officers of the two departments, both naturally anxious to complete the works in progress as speedily as possible, bidding against each other for labour. It is not as if it were only the anicut itself that would remain under the charge of the officers of the Department Public Works, but the country is covered with a net work of channels, with works of masonry in all directions, which of course often stand in need of repairs.

3. I will first refer to the tract of country above the Delta which comprises the Taluks.

	Square miles.
Of Peddapuram.	500
Nearly all of Rajahmundry.	747
Yernagudem,*	1,173
And the greater part of Ellur,	731
With the Zemindari divisions of Tuni.	421
Pithapur.	204

The only works in which last (?) are now and then the repair of a revenue building, or a Travellers' Bungalow.

4. In the above tract of country there is but one large tank, that of Lingamparti in the Peddapuram Taluk. It is a fine reservoir, waters an area of 3,598 acres, and the assessment of the land under it is Rupees 12,003. This is the only tank that cannot, I think, be classed as secondary.

5. The high north road runs through the part of the country under notice. It cannot fairly, as regards importance, be classed as secondary, but it is most assuredly in a very secondary condition. I would leave it under the Officers of the Department Public Works. With the above two exceptions, the whole of the works in the Taluks named may, I think, without difficulty be transferred to the Revenue authorities.

6. I forward a Statement (A) showing the number and salaries of the executive agency which I propose should be placed under the Collector, to carry on the works in the tract of country above the anicut. The subject was fully discussed with the District Engineer last year, when the Chief Engineer called for somewhat similar Statements. I have forwarded a Memorandum (C) showing the Maramut Establishment under the Collector, before the existing system was brought into operation.

7. It will be seen that the total cost of the establishment proposed by me is Rupees 320 per mensem, or Rupees 6,240 per annum. Major Stoddard was of opinion that the Superintendent should receive Rupees 200 a month, but I think Rupees 120 sufficient. I propose, as was the case before, to allow him a Gumastah and a peon. The Superintendent, as well as the Maistries, should receive travelling batta at the same rate as is now allowed to the servants in the Revenue Department when travelling on duty. The pay of the Maistries is higher than formerly, but good men are not now to be got at a lower figure; and it must be remembered that the services of the Samutdars (Karkons), who used to check the measurements made by the Village Officers, have been dispensed with, and that a good deal of the work of making check examinations will now therefore devolve on the Maistries. The three Revenue Inspectors allowed in each Taluk are already very fully employed on their own particular duties.

8. I have, in the proposed revision of village Establishments, provided for the few Ninkantis required to look after certain tanks in the tract of country under reference. No further special Establishment will be required for the conservancy of any of the works in these Taluks.

9. As regards Estimates, Progress reports, and accounts, I propose that those in the Taluks should be kept according to the accompanying Forms, Nos. 1 to 5. The cash accounts to be kept as far as possible in the same form as in the Manual of Taluk Accounts. I presume the rules which now obtain in regard to submitting Estimates for the approval of the Deputy Chief Engineer will still continue. Such Statements may conveniently be sent in the forms hitherto adopted by the District Engineer, and the same as regards bills for work executed. The Statements and Bills to be submitted through the District Engineer, who will, I conclude, from time to time cause important works to be examined and reported on, after the execution of repairs by an Officer of his Department, as was the practice under the old system. It will also be necessary for the Collector to prepare, and submit in due time, an Estimate of the amount of expenditure proposed to be incurred in the following official year with the view to meeting the requirements of the Budget system.

10. I also submit a Statement marked B, showing the Establishment which will, I think, be necessary, if it should finally be determined to place the Maramut work of the whole District, save the works of irrigation and navigation in the Delta, and those connected with ports and harbours, under the Collector. There are no roads in the Delta which can be considered as anything but secondary.

11. The system of giving advances for works cannot, I fear, be done away with. If the execution of the ordinary repairs to tanks or water courses are entrusted to the Village Officers, advances must still be made, but, with moderate care, I do not think any considerable sum need be left outstanding at the close of each season.

12. In accordance with the instructions given, I have named the Lingamparti tank as a work falling under the description of those which it would appear are to be under the immediate care of the Officers of the Department Public Works, but no inconvenience is likely to arise should it not be thought worth while to place this single work under a different Department. If it should be determined to place the northern road under the Collector, it will be necessary to employ a Gumastah and two peons in the Tuni Division through which the road runs for 13 miles.

ENCLOSURE No. 1.

ABSTRACT.—Statement A, showing the Establishment proposed to be entertained under Collector, for the Maramut work of the upper Taluks.

ENCLOSURE No. 2.

ABSTRACT.—Statement B, showing the Establishment proposed to be entertained under Collector if the Maramut of the whole District, save irrigation and navigation works in Delta Taluks, is placed under Collector.

ENCLOSURE No. 3.

ABSTRACT.—Memorandum C of the Establishment employed under Collector previous to the transfer of the Maramut works to, the Department Public Works, in the District of Rajahmundry.

ENCLOSURES Nos. 4 to 8.

ABSTRACT.—Blank Forms of Estimates, &c.

Exd. J. Tulloch.

From G. THORNHILL, Esq., Collector of the Kistna District, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Masulipatam, 26th July 1862, No. 169.

1. With reference to the Board's Miscellaneous Circular, No. 3,410, dated 26th May 1862, and to Circular dated 4th July, No. 4,322, calling for reply to the above within ten days, I have the honor to state, that I have received a Report* on the subject from the District Engineer, and from some of the more experienced Tahsildars in the District. The Sub-Collector having recently joined, has not had time to submit his report. In the Secretary of State's despatch, the Deltas of the Kistna and Godavery have been expressly excepted from the operation of the scheme; it will only therefore be partially applicable to this District.

2. DEFINITION OF SECONDARY WORKS OF IRRIGATION.—Beyond the Delta, there are no works of irrigation of such magnitude, as would render it necessary to place them under the special charge of the Executive Engineer. The term "secondary," as applied to tanks and channels should, in my view, include all except those of such magnitude, as to command the irrigation of considerable tracts of country, and could not be fairly considered applicable to those which affect the interests of one or two villages only.

3. SECONDARY ROADS.—As regards communications, I should class, as "secondary," only such roads as are chiefly of local importance, and the benefit of which is not likely to affect materially the interests of more than one or two Taluks. For instance, a road connecting two Taluk Kasbas, or a Taluk Kasba with the head quarter station, provided it was not part of a more extended line, I would class as secondary; whereas, all roads whether Trunk roads or not, forming part of main lines of communication with other Districts, I would place under charge of the Executive Engineer.

4. Annexed is a Memorandum showing the lines of road in this District, which should be left under the Engineer.

MEMORANDUM.

1. Road from Bezoarah to Hyderabad.
2. Trunk road No. 6 from Inkoie to Guntoor and Seetanagaram, and in continuation to Perikid.
3. Trunk road No. 7 from the Nellore frontier at Koppirapad to the Kistna at Pondugal.
4. Proposed road from Guntoor to Vinnueonda and to the Kurnool frontier.
5. Proposed road from Guntoor to Pidugurula on Trunk road No. 7, continued to Dachapalli.

5. Annexed is a Memorandum showing the Establishment proposed to be retained both for the executive work, and for conservancy purposes.

For the Huzoor.		Salary.	For the Taluks.		Salary.
		RS.			RS.
1 Native Accountant...	...	25	1 Sub-Overseer...	...	25
1 Assistant do.	...	15	Travelling allowance.....	...	15
1 Vernacular Clerk ...	...	20	1 Gumastah under him ...	...	14
1 English Clerk... ..	...	25	1 Lascar for the Sub-Overseer...	...	5
1 Assistant do.	...	15	Sader... ..	...	1
		100			60

Also an addition to the pay of the Revenue Head Clerk 15

Totaper month .. 115

ESTABLISHMENT required for Conservancy purposes.

	Class.	Number of Tanks.	Number of Nirgun- ties required for them.	Amount of pay per year at 24 Rs. each.
Irrigating above 1,000 acres...	1st	5	20 (4 for each Tank.)	Rs. 480
Do. from 601 to 1,000...	2nd	10	30 (3 do.)	720
Do. 301 to 600...	3rd	21	42 (2 do.)	1,008
Do. 101 to 300.....	4th	84	84 (1 do.)	2,016
Below 100 acres.....	5th	376	None.	...
		496	179	4,224

For the tanks of 5th class irrigating lands below 100 acres no establishment is required.

6. A Memorandum showing the proposed mode of keeping the accounts is also attached to the end of this letter. It has been prepared by the Head Serishtadar, in communication with some of the Tahsildars, and seems well suited to the end in view.

7. The Board will observe that Major Anderson, in paragraph 2 of his letter, proposes to confine the boundaries of the Delta to the tract of the country actually irrigated from the anicut. Strictly speaking, this is no doubt correct, but I think it would be more convenient, if the Delta ranges were made conterminous with Taluks. I would thus divide the District into

Delta Taluks.

1. Repalli.
2. Bapatla.
3. Bandar, except Divi.
4. Gudivada.
5. Bezoarah.
6. Nuzid Zemindary.

Non-Delta Taluks.

1. Guntoor.
2. Krosur.
3. Rajapet.
4. Vinnuconda.
5. Palnad.
6. Nandigama, including some Zemindary Taluks.

A portion of the Bapatla and Bezoarah Taluks are above the range of anicut irrigation, but as the Executive Engineer must have an establishment at work in parts of those Taluks, I would recommend that the whole of each Taluk should be placed under his charge. It would, I think, lead to confusion to have two separate establishments working in one Taluk.

8. As respects Nuzid, the only part of the Zemindary with which Government officials would be concerned, would be the anicut channels which of course would be under the District Engineer.

9. The Divi division of the Bandar Taluk is the only exception which I would propose. Although a portion of the Delta, it is entirely isolated by the arms of the Kistna from the anicut works, the work to be performed there is all of a nature to be superintended by the Taluk officials;

	Per month.	Rs.
1 Maistry without travelling allowance...	25	
1 Peon.....	5	
1 Gumastah.....	10	
	40	

it is moreover a work which more particularly than in any other locality requires the aid, and co-operation of the villagers, and should, I think, therefore, be placed under the charge of the Revenue authorities. A reduced establishment for that Division is therefore proposed.

10. It seems to be very generally the opinion of those whom I have consulted, that the transfer proposed is likely to be beneficial to the interests alike of the people, and of Government, and I do not doubt that in many respects, the expected benefits will be realized. I fear, however, that the great extent of the Taluks, as now constituted, will operate disadvantageously in preventing that personal supervision, and inspection by Tahsildars on which the success of the scheme will so much depend.

11. In the Non-Delta Taluks of this District, the revenue work is on the whole simple, and the Tahsildar's office establishment is liberal and ample for all office work, but he has been deprived almost entirely of the travelling and inspecting establishment, which he formerly commanded, under the title of Samutdare and Jilladars. This class of servants was formerly largely employed in looking after Maramut works, and their want will, I think, be felt now very seriously.

12. The time of Tahsildars is now largely occupied in their capacity as Taluk Magistrates. Greater accuracy in the disposal of Magisterial cases is now required of them than formerly, and consequently closer personal attention is requisite, and more time consumed; still in the inland Taluks of this District, the ordinary work of Tahsildars is light, in comparison with that in the coast Taluks, and I do not doubt they will be able to superintend the Maramut with fair efficiency. Had the same duties devolved on the Tahsildars of Delta Taluks, I should have felt that they could not have performed them satisfactorily without still further assistance.

13. In regard to the repairs to roads, Civil buildings, &c., in Delta Taluks, I propose to leave them entirely in the hands of the Executive Engineer; it would be extremely difficult to organize a double Establishment in the same Taluk, and no good could result from the attempt.

ENCLOSURE No. 1.

From Major J. C. ANDERSON, District Engineer, Kistna District, to G. THORNHILL, Esq., Collector of the Kistna District, dated Bezoarah, 14th July 1862, No. 313.

* Proceedings of the Board of Revenue, No. 3,410, dated 26th May 1862.
Despatch from the Secretary of State, No. 9, of 5th April 1862.
Collector's letter No. — dated 30th June 1862.
Do. No. — 9th July 1862.
† No. 4,208 of 30th June 1862.

1. Referring to the correspondence as per margin,* on the subject of the re-organization of the Department of Public Works, and to the Proceedings† of the Board of Revenue, deciding that the exception made by the Secretary of State from the proposed changes, is confined to the Deltas and the irrigation works connected with them, I have the honor to report that the transfer of the Non-Delta portions of this District will absorb two executive ranges (the 3rd and 4th), and part of a third (the 5th). As the Divi Taluk is not connected with the anicut system, the irrigation works there may probably be included in the same category with the Delta tanks; so that the portion of the District to be retained on the present footing would be confined to the 1st and 2nd ranges on the Guntoor side excepting several tanks in the old Mangalagherri and Pratipad Taluks, and to the 6th, 7th (excluding Divi), and a portion of 5th ranges in the Masulipatam Delta, comprising the tract of country bordered by the Ellore canal, and the sea on the north and south, and by the Kistna and the Oopputair on the east and west.

2. I would propose to divide the Delta into four executive ranges, leaving the 1st and 2nd as they are at present, and dividing the Masulipatam Delta into two others, which might be classed as the 3rd and 4th ranges, the line of the Pullairu being taken as the boundary between them.

3. I would beg to recommend that all works, not only of irrigation, but communications and buildings in the Delta as above defined, should be under the charge of the range officers. The roads are so intimately connected with the channels that it would be difficult, even if it were desirable, to have a double set of executives whose distinct duties could never be clearly defined. But as regards expenditure on District roads in the Delta, I think it might be left to your discretion as to what work might be performed with advantage either under your own supervision or those of your assistants and subordinates, but I would deprecate the formation of a Maramut establishment under your orders in the Delta.

4. As regards the Upper Taluks, the most important lines of road only would remain in the charge of the District Engineer, namely, the road from Bezoarah to Hyderabad, by far the most important in the District, though not classed as a Trunk road. Trunk road No. 6 from Inkolet to Guntoor and Sectanagaram, and in continuation to Perikid; and Trunk road No. 7,

from the Nellore frontier at Kopperapad to the Kistna at Pondigal. There are besides two lines of District road, which promise to rise much in importance, and which if any considerable improvement were to be decided on, might perhaps with advantage be also placed in the charge of the District or Executive Engineer. I allude to the road from Guntoor to Innacondah and to the Kurnool frontier, and the road from Guntoor to Peduguralla on Trunk road No. 7, continued to Dachepalli.

5. Confining my attention for the present to three main lines of road, I would beg to state the establishment which I consider necessary for their maintenance. Hyderabad road from Bezoarah to Nizam's frontier, 65 miles, one Assistant Overseer and two Sub-Overseers; Trunk road No. 7, 60 miles, one Assistant Overseer and 1 Sub-Overseer. As regards Trunk road No. 6, the Range officers in the Delta, if their establishments are kept up to a proper standard, will, I believe, be competent to superintend them. Were this decided on, the only works in the District for which an establishment would be required under the District Engineer, in addition to the Delta establishments, would be the Hyderabad road, and No. 7 Trunk road; but as the District Engineer would be responsible for designing numerous works in the Upper Taluks for execution by the proposed Maramut establishment, it would be absolutely necessary that he should have an assistant to aid him. He would be stationed at Bezoarah, would have executive charge over the subordinates above specified on the Hyderabad and No. 7 Trunk roads, and would render such assistance as might be required by the Collector in designing and inspecting various works. The above charge may be considered as a third range.

6. There would thus, under the arrangement above proposed, be 5 ranges instead of 7 as at present.

7. The establishments of the Delta ranges may be considered on their own merits. They have no special reference to the question under consideration, and though doubtless changes may from time to time prove desirable, there would seem to be no occasion to propose any alteration at present, unless it may be as regards the establishment in Divi, which, if that Taluk is transferred to the charge of the Collector, would, I conclude, be transferred also.

8. The following is a list of the establishments now employed in the Upper Taluks, which, with the exceptions above noted, it is proposed to remove from the charge of the District Engineer.

3rd Range.....	{ 1 Supervisor. 1 Office Establishment.
4th Range.....	{ 1 Sub-Engineer. 2 Sub-Overseers.
5th Range, Non-Delta portion.....	{ 1 Office Establishment. 1 Assistant District Engineer. 1 Assistant Overseer. 4 Sub-Overseers.
Divi.....	{ 1 Office Establishment. 1 Sub-Overseer.

And the portion of the Establishments which I propose to retain under the District Engineer in the same Taluks is as follows:—

1 Assistant District Engineer.	
1 Office Establishment.	
1 Assistant Overseer.....	} Hyderabad road.
2 Sub-Overseers.....	
1 Assistant Overseer.....	} Trunk road No. 7.
1 Sub-Overseer.....	

9. I question if any accurate conclusion would be arrived at, regarding the comparative cost of the present and the proposed remodelled system, by tabulating the salaries of the former, and ascertaining how far it might be distributed on the new establishment. It may be considered in a measure accidental, that there is a Supervisor in charge of the 3rd range, and a Sub-Engineer in charge of the 4th; for one of the Delta ranges of far higher importance than these, and

involving much larger annual expenditure, is in charge of an Assistant Supervisor; but still the subject must be treated broadly in the first instance, and it is only by taking the establishments as they are, and ascertaining how far they would go to constitute the new Maramut Department that any tangible result will be arrived at. Taking then the actual saving in cash by withdrawing the establishments of the 3rd and 4th, and part of the 5th ranges, it has to be determined how far this sum will suffice to form a Maramut Establishment, whether it will be more or less

than enough. I would propose that for each Taluk* there should be a Sub-

* Guntoor.
Palnad.
Rajapett.
Krosur.
Vinnacondah.
Nundigum.
Bezwa.

Overseer, or a subordinate of similar standing under the orders of the Tahsil-

dar. To each Sub-Overseer, I would attach a Gumastah for keeping his ac-

counts, and one Lascar. This is the only permanent establishment I would

propose to keep up. For the actual executive charge of the works, I would

propose that Gumastahs and Maistries should be entertained in the same manner

as is now done in the 3rd and 4th ranges. In the former there is no permanent subordinate

under the Range officer, Gumastahs and Maistries are entertained as their services are required,

and paid from the Estimates. It would be impossible to define the number of these temporary

employees, as the extent of works will vary from year to year. It would probably be less in

proportion to the expenditure, than it is under the present system, as it is to be anticipated that

the village authorities will be made responsible for the provision of labor, at least to a certain ex-

tent, required for the repair of their tanks. There will be greater facilities of effecting such an

arrangement when the Tahsildars have control of the works; and it is the absence of any assist-

ance of the kind, under the existing system, that gives rise to great delay before a petty work can

be put in hand, and which swells the charge of superintendence (a great deal of time being taken

up in collecting labor), to what may be considered an absurdly high amount.

10. It will be observed that, in allowing a Sub-Overseer for each Taluk on the Guntoor side

of the river, I provide for a considerable increase in the number of these subordinates above the

existing scale. But it is to be recollected that in consequence of the restriction of expenditure in

the last four or five years, the District roads in the Taluks in question have been almost entirely

neglected. Last year something was done as a commencement towards improving them; and it is

to be concluded that the measures now in contemplation for allotting a fixed sum annually for

local improvements in each District, will furnish the means of opening out the communications in

the Palnad and other Cotton-growing Taluks. The importance

* G. O. No. 744, 12th April 1862. and indeed necessity of this has been acknowledged,* and in

reviewing the scale of subordinates I have proposed, I beg

that due consideration be given to the probable expenditure on such roads, in addition to that

on irrigation works.

11. The monthly cost of the present establishment of the 3rd range is Rupees 317,

of the 4th Range Rupees 582, and of the portion of the 5th range not in the Delta is

Rupees 210, inclusive of the salaries of the Assistant District Engineer, of his office establish-

ment, and of an Assistant Overseer employed on the Hyderabad road, who would be retained in

the same position under the new arrangements. The total of the above amounts is Rupees 1,139,

from which has to be defrayed the establishment for No. 7 Trunk road, and two Sub-Overseers

on Hyderabad road. The following deduction has therefore to be made from the above amount,

	Rs.
1 Assistant Overseer on No. 7 Trunk road	80
Travelling allowance	45
1 Sub-Overseer on do.	35
Travelling allowance	15
2 Sub-Overseers on Hyderabad road, at Rupees 35 each.	70
Travelling allowance at 15 Rupees each	30
	275
	864

The cost of the proposed Maramut establishment would be as follows :—

	Rs.
7 Sub-Overseers at an average of Rupees 35	245
Travelling allowance at Rupees 30	210
7 Gumastahs at Rupees 15 each	105
Travelling allowance at Rupees 4½	31½
7 Lascars at Rupees 7 each	42
	633½

The difference between this amount and Rupees 564, viz., 230½, will be the saving effected monthly by the proposed alterations, but from this sum must be deducted the cost of extra establishment which will be required in the Collector's office for preparing accounts.

12. As regards the maintenance of the works in Divi, the Sub-Overseer now employed there would be transferred to the Maramut Department, and there would be neither loss nor gain to Government. The Gumastah and Lascar proposed to be attached to him, might be transferred from the District Minor Establishment.

13. With reference to information called for by the Revenue Board, in their Proceedings* on the subject of accounts, I would beg to recommend that they should be kept in the same form as that in force in the Public Works Department, and they should be submitted through the Tahsildar to the Collector in whose office the bills would be prepared and submitted for audit. Remarks that might be made by the Assistant or District Engineer during the progress, or on completion of a work, would be entered in the Station books, and the Collector would then be placed in possession of all the information they would have to give.

14. As regards the transfer of subordinates from the Department Public Works to the Maramut Department, the District Engineer would of course be glad of such an opportunity, of relieving himself of the most inefficient hands. The Collector would naturally object to such a principle of selection; and the fairest way for both parties, would be to draw lots for the number to be transferred. I would propose, however, that all European and East Indian Sub-Overseers should remain in the Department Public Works.

15. With reference to the question put by the Revenue Board, as to the class of tanks, channels, and communications which may be considered as "secondary," I would beg to state that as regards communications, it would be difficult to define the term. The road from Masulipatam to Hyderabad is not a "Trunk road," but it is certainly not a "secondary" communication. All the other roads in this District, excepting Trunk roads Nos. 6 and 7, may be classed as "secondary" as they are at present; but if the road from Guntur to Cuddapah and Kurnool were to be improved, it might be classed higher than the roads that are confined within the limits of the District.

Circular Board of Revenue, No. 876 of 17th May 1861.

16. As regards channels and tanks, the classification would seem to have been brought under consideration in a separate form, and you will require no information from me on the subject.

(A true Copy.)

(Signed) G. THORNHILL, Collector.

TABULAR Statement showing the establishment at present employed in the Non-Delta portion of the Kistna District, proposed to be transferred to the Collector, and the newly proposed Maramut Establishment.*

	Present Scale.	Salaries.			Proposed scale remodelled.	Salaries.		
		RS.	A.	P.		RS.	A.	P.
Guntur.	3RD CIRCLE.				5TH CIRCLE.			
	1 Supervisor	200			1 Assistant District Engineer.			
	Travelling allowance Office Establishment	60			1 Office Establishment.			
	1 Accountant	35			Hyderabad Road.			
	1 Gumastah	15			1 Assistant Overseer.			
	1 Lascar	7			2 Sub-Overseers averaging Rupees 35	70		
	3 Lascars	18			Travelling allowance	30		
	Travelling allowance of Office Estab. about	12			No. 7 Trunk Road.			
					1 Assistant Overseer	80		
	4TH CIRCLE.				Travelling allowance	45		
	1 Sub-Engineer	300			1 Sub-Overseer	35		
	Full travelling allowance Office Establishment	90			Travelling allowance	15		
	1 Accountant	28						275 0 0
	1 Gumastah	14			Proposed Maramut Establishment.			
	3 Lascars	18			7 Sub-Overseers averaging 35 Rupees	245		
Masulipatam.	Travelling allowance of Office Estab. about	12			Travelling allowance at Rupees 30	210		
	1 Sub-Overseer	25			7 Gumastahs at 15 Rupees	105		
	Travelling allowance	30			Travelling allowance at 4½ Rupees	31½		
	1 Sub-Overseer	35			7 Lascars at Rupees 6	42		
	Travelling allowance	30						633 8 0
					Non-Delta portion.			
	5TH CIRCLE.				1 Assistant District Engineer.			
	1 Assistant District Engineer.				Office Establishment.			
	1 Assistant Overseer.				1 Assistant Overseer.			
	1 Sub-Overseer	50			1 Sub-Overseer	30		
	Travelling allowance	30			2 Sub-Overseers at Rupees 30 each	60		
	2 Sub-Overseers at Rupees 30 each	60			1 Sub-Overseer	25		
	1 Sub-Overseer	25			Travelling at 15 Rs. each.	45		
	Travelling at 15 Rs. each.	45						210 0 0
					Divi Taluk.			
	Divi TALUK.				1 Sub-Overseer	35		
	1 Sub-Overseer	35			Travelling allowance	30		
	Travelling allowance	30			1 Gumastah	15		
	1 Gumastah	15			Travelling allowance	4½		
	Travelling allowance	4½			1 Lascar	6		
	1 Lascar	6						90 8 0
Total		1,229	8	0	Total		999	0 0
					Saving effected*		230	8 0
					Total		1,229	8 0

* From this sum is to be deducted cost of extra establishment required in Collector's office. PEZOARAH, 14th July 1862.

(Signed) J. C. ANDERSON, Major, District Engineer, Kistna.

(A true Copy.)

(Signed) G. THORNHILL, Collector.

ENCLOSURE No. 2.

MEMORANDUM regarding the Maramut accounts.

1. Estimate for the repairs to Irrigation works, within the highest year's Revenue derived from the work during the preceding five years. This Estimate should be prepared by the Sub-Overseer and forwarded to the Taluk. The original copy should be sent to Huzur by the Tahsildar with his counter-signature and opinion. This will be retained in Huzur, and an order will be issued to Tahsildar, who will verify the amount by measurement, and submit a bill for actual expenditure.
2. Abstract Statement showing the extent of land already irrigated under the tank with the sist thereof, and excess land to be brought under culture by the repairs recommended, with the probable amount of Revenue to be derived therefrom. This should be prepared in the Taluk after the receipt of the estimate, and sent to Huzur with the original estimate.
3. Book of Advances. As soon as the Estimates are sanctioned by the Collector, the payments made in advance through Sub-Overseer from time to time to the villagers or tank-diggers out of the estimated amount, should be entered individually in the Sub-Overseer's Chittah book, and an abstract of it should be sent to Taluk. A similar book showing the advances made to Sub-Overseer, should be kept in the Taluk.
4. Receipts for payments made. As often as payments are made on account of the works, a receipt should be taken for the same by the Sub-Overseer, which will be sent to Huzur through the Tahsildar once every fortnight, to compare with the abstract account* of expenditure. After the bills are submitted to Audit Office, these receipts may be returned to Taluks to be kept for five years and then destroyed.
- * No. 7.
5. First Mashat Jabitta. Once every 15 days the Revenue Inspector or Sub-Overseer should survey the work done, and send the account thereof to the Taluk—one copy thereof should be submitted to Huzur.
6. Account of the check survey made by the Taluk officials. The Tahsildar or his next officer should examine the measurement after the work is completed, and submit an account of this to Huzur.
7. Fortnightly report showing the amount estimated for all the works in the Taluk, the amount advanced on that account, and the extent of work done. To be prepared in the Taluk from the Mashat Jabitta, &c. accounts, and a copy thereof sent to the Huzur.
8. Monthly account of receipts and expenditure termed "Nagad Jama Kurch Chitta." To be prepared in the Taluk showing the amount sanctioned as per estimates, amount advanced on account of the works, and the balance. This should be submitted to Huzur.
9. Annual account to be submitted to Huzur by the Tahsildar, viz., "Metu Jamaklunch." This account shows the amount of estimate for the repairs of different tanks, &c., in each village, the extent and the amount of the work done, as well as the gross amount of receipts and expenditure in the Taluk.

Accounts to be prepared in the Huzur for submission to the higher authorities.

The Collector should forward an Abstract Statement of Estimates for all marginal works which he has sanctioned, to the Superintending Engineer for his approval. This should contain the information contained in No. 2 (Abstract Statement.)

Ordinary and occasional Estimates for irrigation works, and repairs to roads to be executed within the discretionary allowance and out of Local Funds, and repairs to Revenue buildings within 500 Rupees, provided the Estimate does not exceed one-fourth of the value of the building.

Emergent works to be executed, and a similar Abstract Statement should be submitted to the Superintending Engineer for his approval. The Abstract Statements should be returned by the Superintending Engineer to the Collector with his counter-signature.

Bills of actual charges for all works, ordinary, occasional, and emergent, should be submitted by the Collector to the Audit Office at the end of each official year, with the abstract Statement of Estimates counter-signed by the Chief Engineer.

(Signed) G. THORNHILL,
Collector.

MASULIPATAM,
20th July 1862.

Exd. J. Tulloch.

From E. F. ELIOTT, Esq., Sub-Collector, in charge of Nellore, to W. HUDLESTON, Esq.,
Secretary to the Board of Revenue, Madras, dated 30th July 1862, No. 191.

1. As directed in Board's Circular, Miscellaneous No. 3,410, dated 26th May 1862, I have the honor to submit a report on the three points specified by Government in the Order in their Proceedings dated 21st May 1862, No. 1,116, a copy of which, together with the despatch referred to therein, was received with the Board's Circular under reply.

2. With reference to the first point, the extent and description of works to be placed under the Revenue Officers, and the definition of the class of tank, channel, &c., to be considered to be represented by the term "secondary." The Acting District Engineer Major Greenaway and myself are of opinion that all tanks and channels, irrigating fields assessed under 10,000 Rupees should be termed "secondary," and placed under the Revenue Officers, and all such irrigating above 10,000 Rupees should be retained by the Public Works Department, and accordingly the accompanying Statements B and A have been drawn up. By this arrangement a net revenue of Rupees 5,92,442 will be under the Collector's administration and 4,21,298 under the superintendence of the Department of Public Works.

3. The particulars and description of irrigation works to be handed over to the Collector or retained by the Department having been enumerated in those Statements, it is unnecessary for me to give them in detail again. I will however observe that it was not intended by me at first to have allowed the Department so large a portion of the executive, but in settling the question of channels with the District Engineer, it was considered advisable not to reckon the tanks separate from the channels by which they were supplied, but to count them one and the same, and enter them under the head of channel, and accordingly it has been so done; as an instance, I may cite the Jaffer Sahib channel, which though insignificant in itself, is, when taken with reference to the tanks irrigated by it, a most important work. This channel supplies 21 villages and 33 tanks with water, and irrigates an Ayacut of 6,058 Goortus, bearing an assessment of Rupees 92,018; if taken by itself as a work of irrigation, it would come under the first class, as the extent self-irrigated by it is 1,680 Goortus assessed at Rupees 21,257, but the tanks under this channel if taken separately would all be secondary. Besides this, it is a distinct work of its kind forming a part of the anicut project for irrigating the whole of the Pennar delta, and as such it was considered best to leave it to the greater professional experience and ability of the Department. In fact of the ten channels allotted to them in Statement A, all are more or less connected with a system or project, and as such have been given to the Department. For instance the Survapalli and Nellore channels both form a part of the anicut project, and it would not be advisable to reckon them separately and thus break their link of connection. With regard to tanks only two have been given to the Department the Allur Ramana tank and the Machavaram tank; these are both rain fed tanks and independent of any regulated means of supply from any irrigation work, and as such they have been classified distinctly as "tanks." The rule of definition of description being the above, and those tanks supplied by jungle streams. The Machavaram tank forms a project of itself as it is under consideration to join its bund with that of another large tank Mopad, and thus make one enormous tank. The tanks under channel irrigation have been treated by us rather as reservoirs than irrigating tanks, and it is contemplated, especially under the Jaffer Sahib channel, to do away hereafter with a number of them entirely, and give their beds for cultivation. The total therefore of irrigation works to be given to the Department is channels ten and tanks two supplying 22 villages and 83 tanks with water, and irrigating 20,613 Goortus, assessed at 4,21,298 Rupees as per Statement A.

4. The total of irrigation works to be under the management of the Collector as "secondary" works is 714 tanks; 30 channels irrigating 34,313 Goortus, assessed at Rupees 5,92,112, or a percentage of 58 Rupees on the revenue of the District; the proportion of the former to the latter being nearly two-thirds.

5. With regard to the second point, I beg to enclose forms C, D, and E, which are tabular Statements showing respectively the Conservancy Establishments, proposed for tanks and channels (C and E), and the executive agency, Taluk and Huzur, that will be required (Form D).

* Tank Conservancy.

6. Form C* exhibits the number of "Nirkuttis" now existing and their present income; the number of "Nirkuttis" that are still required, and their estimated income at the rate of 2 Rupees per man per mensem as proposed by Mr. Pelly; † and lastly, the number of villages where "Nirkuttis" are not required. This last particular has been calculated upon the scale proposed by the Collector of Bellary, and mentioned by Mr. Pelly in his Circular No. 876, dated 17th May 1861, where the extent of irrigation is under 56 acres. This scale has not, however, been acted up to except in this single instance; it was found to be far too expensive a scale to be conformed to universally, and therefore the calculation for the number of Nirkuttis required was made upon no given data, but upon a supposition of the general nature of the duties required of them, the size of the tank, and the extent of irrigation. For instance the Kanigiri tank would, under the scale, be entitled to five Nirkuttis, but two only have been found sufficient as the bund is short, and the sluices few in number being only four to admit of the necessity of any number in excess of that being employed. With regard to the Nirkuttis now existing, and their annual incomes, it would be unadvisable I consider to interfere with them, and they should be allowed to exist as they now do, and at the same rates of income which are considerably cheaper than that proposed by Mr. Pelly and seem to be sufficient for them, and the work required of them is regularly done. This Conservancy Establishment as well as all the other estimates have been calculated wholly independent of the irrigation works to be retained by the Department, which both the District Engineer and myself read, it was intended should be, and therefore the Statements herewith submitted by me must be considered for the works under the Collector's administration alone.

7. The Form E is the Channel Conservancy Establishment consisting of 12 Feoms at 1 Rupees each per mensem to look after 12 channels at the rate of one man for each channel. It is necessary that this Estimate should be sanctioned as without it the channels would go to ruin for want of amjir labor to clear them out, as this labor is most irregularly and inefficiently performed at present, which would not be the case if proper supervision were exercised.

8. Form D is the executive agency proposed for Taluk as well as Huzur. A Maistry of 25 Rupees a month has been proposed for each Taluk, and one on 40 Rupees a month for the Huzur. The principal work and the greatest responsibility will fall upon the latter individual and therefore his pay has been fixed in proportion, but it is not excessive. All important work will have to be inspected and supervised by him, and the work of other Maistries in the Taluk checked by him as occasion requires it. A good common Maistry is not procurable under 2

Rupees a month, and therefore I have fixed that as the common rate for every Taluk, and in those Taluks where the work is heavier I have given two Gumastahs, in other Taluks one, and in Udaygiri, Kayale, Kanigiri, and Rapur none, as the tanks are fewer in number and less important, and there are an extra number of Gumastahs for the work required in them, who could do the Maramut work in addition to the ordinary duties. As there was no Head Maistry for the Sub-division, and the Establishment very limited for the work now existing, I have proposed two Deputies, a Gumastah, and an Attender for that office, at a cost of 39 Rupees monthly. The total cost monthly for the whole executive agency Taluk and Huzur proposed by me consisting of 13 persons will be 570 Rupees, 1,810 per annum, which is at the rate of one per cent. on the revenue of the District to be administered by the Collector.

9. With regard to the third point, I beg to enclose forms of accounts Nos. 1 to 8 which I propose should be kept locally, and Nos. 9, 10, and 11, which are to be rendered to the office of Audit for Public Works by the Collector.

10. With regard to the "Communications" to be considered "Secondary," which I have omitted to mention, I would suggest that all imperial roads should be retained by the Department, and all Local Fund roads should be given to the Collector. This is the best and clearest distinction we can make. I would propose no extra Establishment for these roads as the Taluk and Huzur executive agency could be made applicable to them likewise.

11. In conclusion I would observe that I have given the subject the most careful consideration, and that the foregoing recommendations have been made by me after availing myself to the fullest extent possible of the experience of the District Engineer Major Greenaway, and of intelligent local native subordinates, and that I believe them to be the best arrangements that could be made for this District.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing the particulars of Irrigation Works of upwards of 10,000 Rupees proposed to be placed under the superintendence of the Department Public Works.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the Irrigation Works below 10,000 Rupees proposed to be under the management of the Collector.

ENCLOSURE No. 3.

ABSTRACT.—Tank Conservancy Establishment "Nirkuttis."

ENCLOSURE No. 4.

ABSTRACT.—Huzur and Taluk Executive Agency.

ENCLOSURE No. 5.

ABSTRACT.—Channel Conservancy Establishment.

ENCLOSURE No. 6.

ABSTRACT.—Ten days' Report of work performed in Nellore District in the month of June 1862, Fasli 1262.

ENCLOSURE No. 7.

ABSTRACT.—Progress Report of Nellore District for the month of June 1862, Fasli 1272.

ENCLOSURE No. 8.

ABSTRACT.—Account of Receipts and Disbursements in the District of Nellore in June 1862, Fasli 1272.

ENCLOSURE No. 9.

ABSTRACT.—Statement showing the details of Works estimated and performed.

ENCLOSURE No. 10.

ABSTRACT.—Form of Receipt for money paid on account of work sanctioned to be performed in June 1862, Fasli 1272, Nellore District.

ENCLOSURE No. 11.

ABSTRACT.—Ordinary Estimate Nellore Taluk.

ENCLOSURE No. 12.

ABSTRACT.—Statement of work performed for the Nellore Tank Sluice in June 1862, in Nellore District, Fasli 1272.

ENCLOSURE No. 13.

ABSTRACT.—Statement showing work done to the river channels by the village labor in the Taluk of Nellore.

ENCLOSURE No. 14.

ABSTRACT.—Account current of the Collector of Nellore for the month of—

ENCLOSURE No. 15.

ABSTRACT.—Progress Report of the District of Nellore for the month of June 1862, Fasli 1272.

ENCLOSURE No. 16.

ABSTRACT.—Form of the Bill to be sent to the higher authorities.

Ed. J. Wright.

From A. WEDDERBURN, Esq., Collector of Cuddapah, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Muddenpully, 6th June 1862, No. 78.

1. In accordance with the instructions contained in Proceedings of the Board of Revenue, dated 26th May 1862, No. 3,410, and order thereon, I have the honor to state that a meeting of the District Officers was held at my Office, to consider the three points referred to by the Board, in the above Proceedings, viz:—

- (1.) The exact extent and description of works to be placed under the Revenue Department;
- (2.) The agency and salaries required to carry out these objects; and
- (3.) The method of local account and subsequent audit.

(Present—Collector, District Engineer, Sub-Collector, 1st Assistant District Engineer, late Deputy Serishtadar Collector's Office, late Serishtadar Sub-Collector's Office, Collector's Serishtadar, and Sub-Collector's Serishtadar, Tahsildars of Muddenpully, and Huzur second Vernacular Clerk, who is an experienced Native Accountant of Maramut.

2. (1.) *Extent and description of work.*—This definition implies that a division of work is to be made, that irrigation and other works of a certain value, or else repairs to a certain amount, are to be committed to one agency, and that works of a higher value, and repairs of a greater amount are to be undertaken by another agency.

3. The multiplication of executive agencies, is found by experience to result in the raising of rates of labour. The present competition of the Railway Executive Department (and the future competition of the Irrigation Company will follow) has been found to raise the local rates of skill labour in the neighbourhood 75 per cent.; and of unskilled 25 per cent.; of course other agencies combine in producing this increase of hire, which are, the influx of money, higher prices of all agricultural produce, and increase of carriage hire.

4. A demand by the Engineer Department for wudders for road work, will interfere with a demand for the same class of people, who are absolutely required for tank bund, earth work of a heavy description, the puddling of which is essential to the stability of the work, can only be well done by a peculiar class of navigators, as the wudders may be termed, and must be done under scientific supervision.

5. If the executive is under one head, he will arrange for roads being carried on at one time of year, and tank bunds at another, so that the two requirements would not clash. Under two executive agencies, the Engineer will naturally consider that his roads require to be pushed on, just as the Railway Engineers will not stop their works, because the Collector wants wudders for tank repairs; and the wudders will naturally go to the best paymaster, so also with bricklayers, carpenters, and other skilled workmen, who, in Cuddapah, are not procurable now by private individuals. These objections go to the theory of a division of executive.

6. The next point is the consideration of the transfer of the executive, and the reasonable deduction from the above arguments is, that it should be total, or none.

7. If the executive be wholly transferred, matters revert to what they were in 1856. The change then was surely not made without due consideration of the evils inseparable from the former system.

8. My view of the case is, that the chief reason why the Department Public Works agency, has been found so expensive is, that it was framed with a view to the superintendence of a much larger amount of public works, than the subsequent financial position of Government allowed of being undertaken. Even under the subsequent reduction of the superintending agency, a much larger amount of expenditure could be supervised by the present establishment, than the exigencies of Government allow to be incurred. Moreover, there is no real economy attained by the employment of low paid distributors of money.

9. Scattered works, and extended area, will cause expensive superintendence, under the agency of any Department.

10. In the Road Department, superintendence can be concentrated; with scattered works of irrigation, it cannot.

11. On a consideration of the comparative importance, value, and results, of irrigation works, whether small or great, as compared with roads and buildings, it cannot be admitted that the former can be constructed with less science, and under less careful supervision, than the latter.

12. A small unpuddled tank bund, a badly revetted facing, an insufficient escape channel, may cause the loss, not only of the small tank itself, but of others, in the line of drainage. The damage from the neglect of a small reservoir for the supply of the high level of a small canal in Scotland, under my own observation, cost the Home Government £10,000 in 1859. A similar neglect may lead to nearly as great a damage in this country; so that irrigation works of all sizes ought to be under scientific supervision.

13. The question then arises, can this scientific supervision be exercised better by the Revenue Department, than by trained professional officers, the subordinate agency under one Department, will cost the same as under another Department, and the superior officers of the Engineer Department have much more time at their disposal for visiting works of irrigation, than the Collector, and his Assistants, who have their other special duties to carry on, and who require their large Establishments to accompany them, and whose inspection, under the former system, never approached the amount of present inspection.

14. The next thing to be considered is, whether a change in the system of executing certain works can be effected; for instance, could the contract system be carried out in tank bund earthwork or masonry. The general opinion is, that it could not. The check of the head village officer, it is considered, could not be depended on. Integrity is rare and public spirit unknown in this District among village officers. The head of the village is likely also to be the only available contractor; his interest to do the work cheaply to himself would clash with the possibility of its future stability. Railway earthwork embankments can be executed by contract, the bank settles with rain and time; but a tank bund is a work of a more critical nature.

15. (2.) *The agency and salaries required in a change of system.* As skilled agency could not be procured at lower rates by the Collector (unless indeed the agent expected to make irregular profits) than by the District Engineer, the alternative in making the transfer of the executive, would be to transfer the subordinates of the Department Public Works to the Collector, this is change but not reduction or reform.

16. But, whereas the subordinate agency of the Department Public Works at present, supervise both roads and irrigation works, a division of those functions would be attended with a numerical increase of agency, for, a member of the Department Public Works supervises a road and some tanks in the same vicinity, at one and the same time.

17. The outlay for supervision of tanks alone, could not afford superintendence of a high or responsible kind; yet the work, if not of high cost, is of great responsibility. The future higher check on a low paid officer, is the unscientific Tahsildar of a Taluk. Under the old system, the Civil Engineer was the Inspecting Officer; this check will be removed when the irrigation works are withdrawn from the Department Public Works.

18. The other duties of a Tahsildar would prevent his exercising much of a supervision check the low paid executive officer would be of a low stamp, and the consequences would be more disastrous, than the defalcations occasionally brought to notice, among the subordinates of the Department Public Works.

19. At present, two responsible Departments check each other; fraud is brought to light; but if the Department Public Works check is withdrawn, things may go on quietly enough and few open scandals may appear, but the system may all the time be thoroughly rotten at core.

20. The time of floods will probably be the test of the change of system, but it will be a late and expensive one; a bund fails from being scamped; other tanks follow; the subordinate mistry or Sub-Overseer made use of his opportunity, the Tahsildar reports that Revenue business or Magisterial cases kept him engaged, and he did not inspect the tank, or his predecessor had not inspected it; or if either had, they neither of them knew whether the bund had been puddled or not, it all looked hard and solid on the surface. Responsibility would be difficult to be enforced. Such a case shows what agency would be imperatively required for the

21. However, the following scale shows what agency would be imperatively required for the execution of the whole irrigation works, under the Revenue Department :—

Taluk Establishments as per accounts particular enclosed.																																																
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Average expenditure on tanks Rupees 30,000. This is about 50 per cent. on repairs, as much as, or more than, the Department Public Works costs at present, in reference to the same.

22. In a letter to Government, dated 6th April 1862, with reference to the Government Order of 22nd March 1861, No. 585, on the large amount of small works which take up the time of the Department Public Works, I suggested that three Maistries and three Writers on Rupees 1,620, annual salary, might supervise minor works up to Rupees 200; but for the reasons given already, I am not disposed to recommend the change of executive. I would rather lay down a principle that all petty works under Rupees 20 should be executed by the villagers, at their own cost, and not come under estimate at all. There is not the same state of things in this District as in Tanjore where in 1858-59, the number of bills was 199, and the average amount of each about Rupees 23.

23. As regards Establishment for the distribution of water, if the executive be transferred, the Neercuts, or water distributors, to be sanctioned by Mr. Pelly would remain as they are; there would be no difference in their charge, under whatsoever department they were placed. The estimate submitted to Mr. Pelly on the enfranchisement of their Inams, was Rupees 12,624, but this is not an element that concerns the point in question.

24. (3). As regards the method of accounts to be kept, if the executive be transferred, there would be the estimate by the Sub-Overseer (the old fictitious time contract supposed to be executed by the wudders, which was never enforced, and traditionally adhered to from a supposed effect of fear thereby excited would not be required) a monthly progress report (it used to be fortnightly, in the Revenue Department), and account current; and lastly, the submission of bill for audit.

25. The native officers present, two of whom were experienced under the former system of executive agency, having been both Tahsildars, and afterwards Huzur Serishtadars (now pensioned), the third a Tahsildar, who had also experience, the fourth an Accountant of Meramut, and the fifth and sixth being the Huzur and Sub-division Serishtadars, concurred in the views stated in this letter.

26. I regret that I am unable to devise an agency which will be both cheap and efficient. I never knew the time when Ryots cheerfully co-operated in public works, or had deeper views of their responsibility than at present. The influence of the Collector may have been legitimate in ordering the Tahsildars to get works done cheaply and quickly, but I doubt if the means used by Tahsildars of forced and ill paid labour, would be called legitimate, if cheap, in the present day. Indeed there are too many rivals in the field for any such system to work now, and money is more plentiful, and labour at a premium.

27. The irrigation system demands the check, not of one Department only, under which it is proposed to be replaced, but of two petty damages of such works involve serious results, the supervision of the repair of small works must be always heavy, in proportion to the amount of repair. If Government would forego the water rate from minor works, and charge the dry rate alone, there would be considerable loss of a fluctuating revenue, but the people would find the works of sufficient value to repair at their own cost; at present they allege, and not without reason, that the high water rate involves delivery of water free of other charges. There never was a system in this District of the Ryots willingly repairing works at their own charge; they can be forced to do so, by a cess levied. The remission of the enhanced assessment on all tanks below 65 acres, would reduce the number to be looked after from 1,577 to 412; but the loss of revenue would be great.

28. The Dasavandham system, or remission of part of the assessment for their continuous repair, under which there are 2,983 tanks, does not answer. Repairs are not made, or only after official pressure. This shows that a partial remission of the wet assessment, does not hold out sufficient inducement to keep the works in a safe and satisfactory state; so long as the tank holds water, it is all that the Dasavandhamdar cares for, but he will not face a bund, or raise it, or widen an escape channel, or incur any outlay, without Government inspection and pressure. The Dasavandham tanks, which are mostly small, and which were really constructed by private individuals in former times, are 2,983 in number at present, nearly double the number of the Government tanks. Some of their original number were taken permanently under Government management, in consequence of repeated failure of repairs; the persons, who hold the Dasavandham, are often residents of a distant country; the Inam is held in shares, and the trouble of ascertaining the residence and shares of the various Dasavandhamdars, when a repair is ordered by the Collector, can be conceived. A late Governor, the Marquis of Tweeddale quite disapproved of the Dasavandham system, and though it seems a convenient way of getting rid of the trouble of managing small tanks, it does not answer in practice.

29. A system of public works supervision, with grades of educated professional officers, and subordinates, was established after the report of the Public Works Commission of 1853. The policy of expending large sums in the improvement of the country, even by resorting to loans, instead of depending on a casual surplus of yearly revenue, was admitted. But though the supervising staff was organized, the intended expenditure, from unforeseen disaster, did not follow, so that the cost of supervision appears great in proportion to the actual expenditure.

30. The way to reduce the comparative cost of supervision, is to increase the outlay, which it has to supervise; if such outlay be required, and few will deny that large expenditure on public works is required, but of all apparent saving, the most dearly paid for in the end, is the resort to cheap agency in this country. And even in a financial point of view of the narrowest description, it may be profitable to pay 50 per cent. on the outlay for supervising the repair of the breached bund of a tank. I do not say that it need cost so much, if the Officer has other works in the neighbour-

hood, which he can supervise at the same time, but even if it did cost 50 per cent, it would be cheaper in the end to have had the work solidly constructed than to have to get it done a second time from the bund not having been puddled, or the masonry having been scamped, and a second breach, the consequence, at double expense, loss of the season and of the crops to the Ryots, and of one or two years revenue to Government. It is so easy to cheat by heaping on loose earth, and rammings the surface only; which results in a subsequent settlement of the bund and leakage. I have said that contract work will not answer in this country for irrigation works, but if tried, it could be only safely tried under professional superintendence. The time has not arrived, when honest contractors are to be found; till then, we must work on the safest, and in the end, most economical plan, of placing irrigation works under scientific professional Officers, and their trained staff. These works are not fitted to be entrusted to the charge of amateurs not officially versed in Civil Engineering.

31. As to the Collector being better served than the Engineer, I take leave to doubt. True, the more settled life of the Revenue Department attracts a higher rank of men to that Department, who dislike the constant travelling, fatigue, and exposure, of the Public Works Department, but unless the Collector and his Assistants travel continually on inspection tours, which would quite interfere with their usual duties, and stop half the work in their offices, there would not be the supervision now exercised, which keeps the subordinates of the Department Public Works up to the mark; and when personal and local supervision slackens, the result is known.

32. An element in the means of procuring faithful service is the hope of promotion. I have shown that the superintendence of irrigation expenditure, under the Collector, could not be highly paid, and the highest Officer I named was a Sub-Overseer on Rupees 50. If professionally speaking, he turn out a success, to what is he to rise, his attainments are not such as to fit him for Revenue or Magisterial practice, or promotion; without the stimulus of promotion, a great incentive to honesty and zeal, is withdrawn.

33. I must also record a fact which tells against any radical change in the present Department of Department Public Works. I have had applications from Department Public Works men on Rupees 150 per month to take a subordinate office in my Department on Rupees 35, any thing in fact, their life being one of fatigue and exposure, they tire of it, they cannot drag their families over the country with them, and the high pay of the Department Public Works, is scarcely sufficient to keep its establishment from resigning. In spite of my persuasion to the contrary, a man who was under me some ten years ago as Sub-division Bricklayer Maistry, and who has since risen to the grade of Overseer in the Department Public Works, and who is a most excellent and trustworthy man, a character he began with, and has retained, has now sent in his resignation, and is ready, instead of his present salary of Rupees 150, to take a petty writership on Rupees 35 a month in my office. That man cannot be replaced by the Department Public Works, his attainments, experience, and skill, are now lost, and thrown away. He will not be very useful to me, but he was invaluable to the District Engineer.

34. If an average expense of Rupees 30,000 or 5 per cent. be required to keep in repair irrigation works yielding a revenue of 6½ lacs, I have shown that the Revenue Department could not do the supervision work cheaper, than at 50 per cent., owing to the scale of establishments required, and on account of the scattered position of the works. This is just as much or more than the present supervision of the Department Public Works costs, which, moreover, is available at the same time for imperial roads and buildings.

35. And the conclusion I come to is, let matters remain as they are, let the Department Public Works have a larger outlay to supervise of public improvements yielding future revenue and profit; so the cost of their fixed Establishment will be comparatively less, and let all petty repairs under Rupees 20 be thrown upon the villagers.

36. Tank repairs, if well executed, will cost less in future years. Tank improvements will repay the cost in future safety of the works; that either these repairs or improvements will be done under amateur, as well as under scientific supervision, is no doubtful question. That scientific supervision is required, I have shown, and that there was no former age in which tanks were constructed on scientific principles, is proved by the fact that almost all native works have been found defective in waste channels, many of which are now in course of being improved; and I have only to add that the large tank of Mutalcheru, now being restored in Kadiri Taluk, which was breached before our assumption of the country, appears to have had no provision at all for the escape of its surplus water; and the conclusion I come to is, that it would be a retrograde step to remove the charge of irrigation works from scientific control, even if, which I doubt, any saving in the cost of superintendence could be thereby effected.

37. Comparison of superintendence in Bengal or England is utterly beside the question, there is no similarity of circumstance, and there can be no comparison of results; six or seven lacs of revenue depend on the scientific expenditure of 5 per cent. scattered over 9,000 square miles; bad work will result in loss of life, of property, and of public revenue, and the cost of superintendence of these repairs is consequently of comparatively less importance than the stability of the works themselves.

38. It is no easy matter to organize, train and retain in working efficiency, a public works staff in a country which does not produce the finished material, where scientific Officers superintend, and train their local Establishment to a point which is not attained by any other temporary organization of labour.

39. It is said that disclosures in some Districts have discredited the system. There have not been such disclosures in this District, in reference to the Department Public Works, and it is unquestionable that the zeal of the District Engineer and his Assistants has prevented the occurrence of such defalcations. Because a defective supervision has resulted in scandals in some Districts, it is scarcely logical to infer that they exist in all, for the sake of checking the dishonesty of subordinates in supervising zeal and activity. If Collectors of some Districts had neglected the supervision of the revenue, it would not occur to place the District Engineers in charge of it, in all Districts. If some Collectors can dispense with the aid of their District Engineer, and think that they can better manage the Department of Public Works, in addition to their own duties, let the experiment be tried in some Districts, before it is extended to all.

40. As a Magistrate, I have had under my official cognizance scandals in the Railway and Forest Conservancy Department, of as serious a nature as any have occurred in the Department Public Works in other Districts. The sole limit of departmental fraud is efficient supervision. I have tried cases of theft of public money, and falsification of accounts, and have observed that the Railway system is administered with less stringent supervision than that of the Department Public Works. I have seen a section of the Railway line inefficiently supervised, and the consequence, fictitious lists of workmen, prepared for the audit of a friendly paymaster, and only accidentally brought to light; but though the ultimate cost of the Railway will be augmented by want of local experience in its Engineers, and want of honesty in its subordinates, there is no proposition of placing that Department under the Collector; and my firm conviction is, that the line would have been constructed as efficiently, and more economically by the Government Engineers and Department Public Works, whose knowledge of the language, and of the people, and of the local rates of labour, and materials, more than counterbalances any imaginary scientific superiority.

41. My argument is, that after at great cost, having organized a Department of Public Works for the executive charge of some of the chief sources of revenue, and the expense of which Department is about to be increased by the appointment of Deputy Superintending Chief Engineers, it is scarcely good policy to remove from it half of its hitherto recognized functions, on account of the

51
necessary (from its being a fixed and not fluctuating supervision) cost of its superintendence of repairs, but which superstition is also a species of *supererogation insurance* of existing works, producing six or seven lacs of revenue, which is thought to be inordinate, but is not really more so than it would be under a change of system; and that the way to lessen its comparative costliness, is to give it more outlay to supervise, to make it thoroughly efficient in the inferior as well as superior grades of Department, and to cause petty repairs to be made at the cost of the villagers, whose duty it is to attend continually to the state of their irrigation works, which, by their carelessness and malpractices they frequently damage, the cost of the repair of which, if timely undertaken, would be the merest trifle. Apologising for the length of this letter, which the importance of the due consideration of the subject, in all its bearings, appeared to require.

ENCLOSURE No. 1.

ABSTRACT.—Account Particular of the required Taluq Maramut Establishment in the District of Cuddapah.

Exd. J. Tulloch.

From A. HATHAWAY, Esq., Collector of Bellary, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Hospet, 2nd August 1862, No. 124.

1. I have the honor, with reference to the Proceedings of the Board of Revenue, Miscellaneous No. 3,410 of 26th May last, to forward copies of Mr. Foord's letter to the Acting District Engineer of Bellary, and of that Officer's reply thereto; and to state that I concur with them, as to the description of works to be placed under the Revenue Officers.

2. Enclosed is a revised Statement (No. 1.) prepared by me with reference to the remarks of the Acting District Engineer, in lieu of the one (marked A) prepared by Mr. Foord, exhibiting the Establishment which I consider necessary to carry out the works proposed to be placed under the Revenue Officers.

3. The subject of the revision of the Conservancy Establishment in this District is now under the consideration of Mr. Pelly, Member of the Board of Revenue. The Establishment proposed in the last Statement forwarded to him with my letter No. 8, dated 15th January 1862, is what is mentioned in the Statement (No. 1.) referred to in the preceding paragraph.

4. As regards the accounts to be kept locally, and those to be forwarded to the Audit Office, I have written my remarks in red ink on the Statement B, which forms an enclosure of Mr. Foord's letter.

5. I concur with Mr. Foord in the opinion expressed in paragraph 2 of his letter.

ENCLOSURE No. 1.

From E. B. FOORD, Esq., Acting Collector of Bellary, to Captain R. C. BABINGTON, Acting District Engineer of Bellary, dated 12th July 1862, No. 108.

1. With reference to the enclosed Proceedings of the Board of Revenue, dated 26th May 1862, I have the honor to forward for your information my views on the three points specified by Government, and request that you will favor me with your opinion on the subject.

(1.) I would propose that the following works be placed under the Revenue Officers, as being represented by the term "Secondary."

I.—All tanks and channels, the revenue derived from which does not exceed Rupees 3,000 per annum.

II.—All communications, the cost of which is defrayed from the Local and Discretionary Funds.

(2.) Statement A shows the number and salaries of the Executive Agency I consider necessary to carry out the above works, and the Conservancy Establishments required to watch irrigation works, and regulate the distribution of water to the lands. I consider it desirable that the entire Conservancy Establishment should be placed under the Revenue Officers.

(3.) Statement B is a list of the accounts I propose should be kept locally, and those to be rendered to the Office of Audit for Public Works.

2. I do not see how the system of advances can be dispensed with. The execution of trifling repairs might be entrusted to the village authorities; but even then, it would be necessary to make small advances, without which they would be unable to procure workmen for any description of work. By the strictest supervision the evils connected with this system must be checked.

(True Copy.) *

(Signed) A. HATHAWAY, Collector.

ENCLOSURE No. 2.

A.—STATEMENT showing the Establishment which will be required by the Revenue Officers to carry out the works proposed to be placed under them.

Permanent Establishment.																	
Names of Taluks.	Overseers.			Gumastahs.			Total.			Pay of Lascars at 4 Rs each per month.			Total.		Amount per annum.		
	Number.	Monthly salary.	For contingent expenses.	Total.	Number.	Monthly salary.	For contingent expenses.	Total.	Number.	Monthly salary.	For contingent expenses.	Total.	Number.	Monthly salary.			
TALUK ESTABLISHMENT.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			
1 Bellary	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
2 Hospett	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
3 Kudligi	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
4 Hovinbadgali	1	25	1	26	1	12	4	16	1	12	4	16	24	8	4	50	...
5 Hurlpunnalli	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
6 Gutti	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
7 Tadputri	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
8 Raidrug	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
9 Anantapur	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
10 Penkonda	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
11 Hindupur	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
12 Madugsera	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
13 Dharmavaram	1	25	1	26	1	12	4	16	2	37	5	42	24	8	4	50	...
Total...	11	275	11	286	13	156	52	208	24	431	63	494	24	96	18	590	7,080
Huzur ESTABLISHMENT.																	
Collector's Department.																	
1 Superintendent																1	50
1 Gumastah																1	30
1 Do.																1	20
2 Do. at 15 Rs. each																2	30
1 Writer																1	40
1 Do.																1	25
1 Do.																1	20
1 Muchi																1	8
Sub-Collector's Department.																	
1 Superintendent																1	40
1 Gumastah																1	15
Total Permanent Establishment.																	
Temporary Establishment at 6 Rupees per cent. on the expenditure (viz. Rupees 60,000) likely to be incurred in the Collector's Department when the Maramut is transferred to it.																	
Grand Total...																	

CONSERVANCY ESTABLISHMENT.

	Number.	Number of Nigantis required.	Their present emoluments after deducting Jodi.	Proposed remuneration per annum.
Tanks ...	351	562	Rs. 7,704	Rs. 17,928
lungabadra channels...	10	80	2,547	3,840
Other do.	9	10	576	300
Total...	370	652	10,827	22,068

BELLARY, 12th July 1862.

(Signed) E. B. FOORD, Acting Collector.

(True Copy.)

(Signed) A. HATHAWAY, Collector.

ENCLOSURE No. 3.

ABSTRACT.—Statement showing the accounts proposed to be kept locally, and those to be rendered to the Office of Audit for Public Works.

ENCLOSURE No. 4.

ABSTRACT.—Copy of a letter from the District Engineer of Bellary to the Acting Collector of Bellary.

ENCLOSURE No. 5.

ABSTRACT.—Statement No. 1, showing the Establishment which will be required by the Revenue Officers to carry out the works proposed to be placed under them.

Ed. J. Tulloch.

From J. I. MINCHIN, Esq., Collector of Kurnool, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated 17th July 1862, No. 72.

1. I have the honor to reply to the Board's Proceedings dated 26th May 1862, No. 3,416, calling for a report on the proposed re-organization of the Department Public Works.

2. I have placed myself in communication with the District Engineer, and with the Deputy Collector Ragoonatha Row to obtain their views on this important and difficult subject.

3. Captain Beatty is of opinion that with the assistance of an Overseer on Rupees 25, a Gumastah for the accounts, and one Lascar in each Taluk, the Revenue authorities might with advantage take charge of, and carry out all Irrigation repairs: the remaining works being left under the Department Public Works as at present constituted, with I suppose some reduction to meet the addition to the Revenue Establishment.

4. The Deputy Collector Ragoonatha Row has favored me with an elaborate report on the subject, which I have the pleasure to forward, as from his great experience both as a public servant and landed proprietor in Tanjore, I consider that his opinions upon it are worthy of the fullest consideration.

5. The Deputy Collector strongly deprecates any return to the old system under which subordinate Revenue Officers were employed as an Executive Agency. The system he proposes would increase the powers of the Revenue authorities as to sanction, superintendence, and control. There would be a separate Executive Department, which in its various grades throughout the District, would hold the same place with reference to the Collector, his Deputies, and Tahsildars, as are now held by Officers in the Police Department.

6. According to the system proposed by the Deputy Collector, the sanction of Government would only be required for works exceeding Rupees 5,000 in cost; all others being sanctioned by the various Revenue authorities, of course within the total expenditure allowed by Government for the District.

7. The estimates for all works should provide for the value of private property destroyed by the works, for which compensation would be required, as well as for any special superintendence that might be necessary.

8. The execution of works should as much as possible be given out on contract, and no advances be ever permitted except in the repair of an irrigation work undertaken by the villagers.

9. As justly remarked by the Deputy Collector, the system of advances was introduced formerly with the object of opening a way for peculation, and for no other purpose.

10. The system of account proposed by the Deputy Collector would make the officer, who sanctioned the work, the party responsible to Government that the sanctioned expenditure had been truly incurred.

11. For works under Rupees 500, within the sanction of the Revenue Officer of a Division, the detailed accounts would not go beyond that officer, whose certificate of expenditure would be the only voucher necessarily submitted to the Department of Audit.

12. The Collector would be responsible for the due expenditure on all works sanctioned by himself, and the Board of Revenue, and only in the case of works requiring the sanction of Government, would detailed accounts be forwarded to the Central Office of the Department Public Works.

13. I entirely concur as to the soundness of the principle on which this system would work, that of placing trust in, and throwing responsibility upon the local officers. The most elaborate system of accounts will never enable a Central Office to detect fraud, or prevent peculation, while all the time and energies of professional Engineers may be frittered away in fulfilling its requirements. When the responsibility is thrown upon a local officer, only gross dereliction of duty on his part could permit frauds to pass undetected.

14. The Deputy Collector has suggested what he considers a minimum scale of Establishment that would be required in a District under this system. I have no doubt that such a scale would be ample for the requirements of Kurnool, but possibly a more numerous staff would be necessary in Districts where the works of irrigation belonging to the Government are more important.

15. There is but one modification of any importance which I would propose in the Deputy Collector's scheme, viz., that the Collector's sanction should be necessary for the execution of even the minor works, recommendations for all works under Rupees 500 being made by the Division Revenue Officer. The sole object of this alteration is to ensure greater fairness in the distribution of works throughout the District, than might be attained if sanction for minor works were left entirely to the discretion of Division officers.

16. Except in the important matters of authority, control, and account, this system would make but little change from that now in existence. Greater power and responsibility would link the Revenue Officers, from Collector to Tahsildar, more closely with the Department of Public Works, but the incongruity of an unprofessional Tahsildar conducting important executive functions, the blot upon the old system, would not be revived.

17. If it is not in contemplation to carry out such radical changes in the principles of the Department, as are advocated by the Deputy Collector and myself, I agree with Captain Beatty in believing that the small establishment suggested by him might suffice to enable the Revenue authorities to carry out all irrigation repairs.

18. The execution of the repairs would be generally in this case left to the villagers, or given out on contract, and the Taluk Overseer would be employed solely on supervision under the orders and responsibility of the Tahsildar. The employment of the latter, as an executive officer should be never resorted to under any circumstances, being incompatible with his other numerous avocations.

19. The increased Establishment that would be necessary under these circumstances in the Collector's office would depend upon the system of accounts that might be required. I need not say that a large staff of Accountants would be necessary, if the present system, which requires the submission of twenty-four monthly returns to the Central Office, be insisted on.

ENCLOSURE No. 1.

From R. RAGOONATH ROW, Deputy Collector of Kurnool, to J. I. MINCHIN, Esq., Collector of Kurnool, dated 9th June 1862, No. 74.

1. As requested in your Memorandum of 3rd June 1862, No. 123, I beg to communicate my views on the re-transfer of the Maramut to the Revenue Department.

2. The first of the three points on which opinion is called for is,

"The exact extent and description of works to be placed under the Revenue Officers, and to define the class of tanks, channels, and communications, which may be termed secondary."

3. I must confess I do not clearly understand what is meant by "placing works under Revenue Officers." If it is meant that the District Engineers should have nothing to do with such works, I would say, there are no works of this description. If it means that Collectors also should superintend the execution of such works, then I would hold that every work executed in a District comes under this head.

4. By the expression that the Maramut Department is not under the Collectors, it is generally understood that they have no checks over the accounts, and no control over the subordinate agency of that Department. If these be allowed, I do not see any necessity to make any other sweeping changes in the organization of that Department.

5. I would most strenuously oppose the entrustment of the executive powers to the Tahsildars. It was this system that gave rise to the necessity of separating this Department from that of the Revenue.

6. The only change that appears necessary is to keep the professional part of the Department independent of that of the Revenue, and to allow the Revenue authorities full powers to sanction and superintend the execution of works, and to punish the subordinate agency for misconduct. The principle involved in this proposal is the same on which the new Police Department is organized and placed under the magistracy.

7. Though this agency must me separate, controlling and checking authority must be one and the same.

8. I think that by the secondary tanks, channels, and communications, it is meant to be understood all such works affecting the prosperity and well-being of one District only.

9. The second point is, what is to be the number and salaries both of the Executive and Conservancy Establishments.

10. No uniform scale for all the Districts can be devised, as it would depend upon the extent of the District, and of the means of irrigation.

11. I beg therefore to propose a minimum scale.

Taluk.		RS.
1 Taluk Engineer, pay being Rupees 100 and mileage at 4 Annas per mile.		15
1 Accountant		12
2 Lascars at Rupees 6 each.....		3
Contingency.		
Division comprising three Taluks.		
1 Deputy Engineer.		200
1 Draughtsman...		50
2 Accountants at Rupees 20 each...		40
4 Lascars at Rupees 6 each.....		24
Contingency.		6
District.		
1 District Engineer..		600
1 Personal Native Assistant...		100
1 Draughtsman...		70
3 Accountants salaries varying 15, 20, 25...		60
1 Head Accountant and Clerk..		50
4 Lascars at Rupees 6 each...		24
With the Tahsildars.		
1 Accountant...		15
1 Lascar...		6
Contingency.		4
With the Division Officers.		
2 Accountants 30+20...		50
1 Lascar.		6
With the Collector.		
1 Manager...		75
3 Accountants salaries varying 20, 25, 30...		6
1 Lascar...		
CONSERVANCY.		
One Lascar for each village at Rupees 5 a month.		

12. The third point is,

The method in which to keep the accounts locally, and to be rendered to the Office of Audit for Public Works.

14. The Deputy Collector has suggested what he considers a minimum scale of Establishment that would be required in a District under this system. I have no doubt that such a scale would be ample for the requirements of Kurnool, but possibly a more numerous staff would be necessary in Districts where the works of irrigation belonging to the Government are more important.

15. There is but one modification of any importance which I would propose in the Deputy Collector's scheme, viz., that the Collector's sanction should be necessary for the execution of even the minor works, recommendations for all works under Rupees 500 being made by the Division Revenue Officer. The sole object of this alteration is to ensure greater fairness in the distribution of works throughout the District, than might be attained if sanction for minor works were left entirely to the discretion of Division officers.

16. Except in the important matters of authority, control, and account, this system would make but little change from that now in existence. Greater power and responsibility would link the Revenue Officers, from Collector to Tahsildar, more closely with the Department of Public Works, but the incongruity of an unprofessional Tahsildar conducting important executive functions, the blot upon the old system, would not be revived.

17. If it is not in contemplation to carry out such radical changes in the principles of the Department, as are advocated by the Deputy Collector and myself, I agree with Captain Beatty in believing that the small establishment suggested by him might suffice to enable the Revenue authorities to carry out all irrigation repairs.

18. The execution of the repairs would be generally in this case left to the villagers, or given out on contract, and the Taluk Overseer would be employed solely on supervision under the orders and responsibility of the Tahsildar. The employment of the latter, as an executive officer should be never resorted to under any circumstances, being incompatible with his other numerous avocations.

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From R. RAGOONATHI ROW, Deputy Collector of Kurnool, to J. I. MINCHIN, Esq., Collector of Kurnool, dated 9th June 1862, No. 74.

1. As requested in your Memorandum of 3rd June 1862, No. 123, I beg to communicate my views on the re-transfer of the Maramut to the Revenue Department.

2. The first of the three points on which opinion is called for is,

"The exact extent and description of works to be placed under the Revenue Officers, and to define the class of tanks, channels, and communications, which may be termed secondary."

3. I must confess I do not clearly understand what is meant by "placing works under Revenue Officers." If it is meant that the District Engineers should have nothing to do with such works, I would say, there are no works of this description. If it means that Collectors also should superintend the execution of such works, then I would hold that every work executed in a District comes under this head.

4. By the expression that the Maramut Department is not under the Collectors, it is generally understood that they have no checks over the accounts, and no control over the subordinate agency of that Department. If these be allowed, I do not see any necessity to make any other sweeping changes in the organization of that Department.

5. I would most strenuously oppose the entrustment of the executive powers to the Tahsildars. It was this system that gave rise to the necessity of separating this Department from that of the Revenue.

6. The only change that appears necessary is to keep the professional part of the Department independent of that of the Revenue, and to allow the Revenue authorities full powers to sanction and superintend the execution of works, and to punish the subordinate agency for misconduct. The principle involved in this proposal is the same on which the new Police Department is organized and placed under the magistracy.

7. Though this agency must be separate, controlling and checking authority must be one and the same.

8. I think that by the secondary tanks, channels, and communications, it is meant to be understood all such works affecting the prosperity and well-being of one District only.

9. The second point is, what is to be the number and salaries both of the Executive and Conservancy Establishments.

10. No uniform scale for all the Districts can be devised, as it would depend upon the extent of the District, and of the means of irrigation.

11. I beg therefore to propose a minimum scale.

Taluk.		Rs.
1 Taluk Engineer, pay being Rupees 100 and mileage at 4 Annas per mile.	...	15
1 Accountant	...	12
2 Lascars at Rupees 6 each.....	...	3
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Division comprising three Taluks.		
1 Deputy Engineer.	...	200
1 Draughtsman...	...	50
2 Accountants at Rupees 20 each...	...	40
4 Lascars at Rupees 6 each.....	...	24
Contingency.	...	6
District.		
1 District Engineer..	...	600
1 Personal Native Assistant...	...	100
1 Draughtsman...	...	70
3 Accountants salaries varying 15, 20, 25...	...	60
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4 Lascars at Rupees 6 each...	...	24
With the Tahsildars.		
1 Accountant...	...	15
1 Lascar...	...	6
Contingency.	...	4
With the Division Officers.		
2 Accountants 30+20...	...	50
1 Lascar.	...	6
With the Collector.		
1 Manager...	...	50
3 Accountants salaries varying 20, 25, 30...	...	75
1 Lascar...	...	6
CONSERVANCY.		

One Lascar for each village at Rupees 5 a month.

12. The third point is,

The method in which to keep the accounts locally, and to be rendered to the Office of Audit for Public Works.

13. Before I can propose arrangements on this head, I beg to describe fully the system which I think should be adopted in the re-organization of the Department.

14. I would propose that the Imperial Government should sanction in their Budget a certain amount for public works in the Presidency, and leave its distribution in the hands of the local Governments, except, of course, such works as would affect interests of other Presidencies also, in which case it becomes an imperial work.

15. This sum should be distributed by Government to different Districts according to their demands, defining the amount for repairs and that for new works.

16. These should never be exceeded.

17. Works affecting more than one District, or costing more than Rupees 5,000, should be sanctioned by Government. Those costing up to Rupees 5,000, from Rupees 1,000, should be sanctioned by the Board of Revenue, in consultation with the Chief Engineer.

18. Those costing from Rupees 500 to Rupees 1,000 should be sanctioned by the Collector and below that sum, by the Division Revenue Officer.

19. Proposals for the construction of any work may proceed from any department.

20. They should first be placed before the District Engineer, who may either reject them or approve of them only on either of the two grounds, viz., on the score of professional impossibility or as unremunerative.

21. These decisions should be forwarded to the Collector, whose orders agreeing with the District Engineer, shall be final, unless appealed against within three months to the Chief Engineer, whose decisions must be final.

22. When the necessary works are thus fixed upon, they should be reported upon and sanction obtained from different authorities as proposed above, the estimates always providing for the value of the private property damaged by such works, and the cost of superintendence.

23. Irrigation works affecting only one village and costing less than Rupees 500, must be performed by the villagers under the superintendence of the Taluk Engineer, and for the estimated amount; if the villagers are found unable to do so, there should be given in contract to the lowest tender under the same superintendence, and if necessary, with any aid to be paid for from the estimates as provided for above.

24. The villagers should, however, be permitted if they think proper to do so to show that the estimates are too low; in which case they should be revised; other works also costing the same amount should be given on contract, and if no contractors take them up, they should be executed under the superintendence of the Taluk Engineer.

25. After completion, these works to be examined by the Division Engineers and reported upon to the Division Collectors, to whom accounts of expenditure should be sent, and his certificate that such sums were spent *bona-fide*, should be sufficient voucher for the Civil Paymaster to debit them in the accounts.

26. Tahsildars should have powers to superintend the execution of such works, to give them in contract and to notice frauds and mis-managements, and report them to the Division Engineer or Revenue Officer as may seem best to him.

27. They should farther be allowed to obtain any professional aid from the Taluk Engineer, who should in all respects hold a position to the Tahsildar similar to that held by his Serishtadar in the Accountant Department and Inspectors in the Police Department.

28. The detailed accounts of such works need not be submitted to any higher authority than the Divisional Revenue Officers, they being strictly responsible for the due and legal expenditure of all the sums thus spent.

29. Works requiring an expenditure of more than Rupees 500, and less than Rupees 1,000, and therefore the sanction of the Collector should be given in contract by the Divisional Revenue Officers and executed under the superintendence of the Divisional Engineering Officers, with the aid of the Taluk Engineers, without prejudice to their own work. When completed, they should be examined by the District Engineer and accounts of expenditure furnished to the Collector, whose approval must be final, and no detailed account of them should be sent up to any other authority.

30. The Divisional Revenue Officers should possess over the execution of these works the same powers that the Tahsildars possess over the first class of works.

31. The same rule would apply to cases requiring Board's sanction.

32. In the cases of works of greater magnitude, the works must be examined by the Chief Engineer or any of his Assistants or Deputies, and accounts submitted to Government for sanction.

33. The following is a form I would propose to adopt of the Statement that should be submitted to Government in cases costing less than Rupees 5,000:—

Description of work.	Estimated amount.	How performed.		The amount cost.	Difference.		By whom passed.	Remarks.
		Under contract.	Under Superintendence.		Increase.	Decrease.		

34. This Statement should be submitted to Government with the Jamabandi Report.

35. This system appears to me to be the simplest, and as it throws responsibilities upon Officers high in rank, it is hoped they would check immense frauds which are now carried on in the view of such authorities with impunity.

36. No advances are at all necessary as the Railway and Irrigation Companies have to my knowledge managed to carry on their extensive works without them. During the execution of a work under contract, part of the estimates may be paid by the Superintending Officers, after examining the quantity of work done, say once a week, always deducting at least 10 per cent. of the actual work performed. I am firmly of opinion that the advance system was introduced to open a safe way for peculation, and for no other purpose.

37. When a contract is taken by the villagers, advance may be fairly made to them within the estimated amount.

38. Money in large sums should never be allowed to remain in the Engineering Department, who should be at liberty to indent upon the Tahsildar for any sum short of the total amount fixed to be spent by several Engineering Officers, by cheques, when such amount was actually necessary to be paid.

39. In cases amounting to more than Rupees 100, the cheque may be paid payable to the contractor in the Taluk Treasury.

40. Whenever any private property would be taken up for works, it should be purchased by the local revenue officers as is done for private companies, the cost being charged to the estimates as already observed.

41. I would also propose that the Taluk Engineers should be appointed by the District Engineer with the consent of the Collector, and should be liable to be dismissed by the same Officers.

42. The Divisional Engineers should hold their appointments directly from Government as do the Deputy Collectors, and should be liable to removal by Government alone.

(True Copy.)

(Signed) J. I. MINCHIN, Collector.

Exd. J. Wright.

From B. CUNLIFFE, Esq., Collector of Madras, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Saidapet, 7th July 1863, No. 233.

1. With reference to Circulars, Miscellaneous, Nos. 3,410 and 4,322, I have the honor to forward a proposed list of Establishment, and certain forms of accounts, on the adoption of which I should be prepared to receive the executive charge of the Tank Maramut of this District as directed in the despatch from the Home Government, dated 8th April 1862, No. 9.

2. The proposed Establishment, prepared by my Serishtadar who had for four years the charge of the Maramut Department, has been acquiesced in by the District Engineer. It has been fixed on the supposition that the Revenue authorities are to have charge of the repairs of all tanks without reference to class, the construction and repair of calingulahs and sluices, and the charge of all the District roads, except Trunk roads, and a list of which is given in Enclosure 1.

3. There are four or five large and important tanks in the District, but not of such magnitude as in my opinion to exclude them from the Collector's charge.

4. The former Maramut Establishment is given in Enclosure 2, and amounted to 3,744 Rupees; while that now proposed reaches (Enclosure 3) 13,596 Rupees, irrespective of batta to the various grades, but including the entertainment of 36 Peons for the supervision of the more important tanks and channels. Such superintendence is very necessary, for without it the villagers cannot be collected together to perform their share of conservancy.

5. Repairs will be conducted, whenever practicable, by the villagers, to whom advances will be made, and it is the absence of this procedure which makes the present system so distasteful to the people, and so expensive to the State.

ENCLOSURE No. 1.

ABSTRACT.—List of works proposed to be undertaken by the Collector.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the Establishment entertained in the District of Chingleput for 1853, for the management of Maramut Department.

ENCLOSURE No. 3.

ABSTRACT.—Statement showing the Establishment proposed to be entertained in the Maramut Department under the Collector of Madras.

ENCLOSURE No. 4.

ABSTRACT.—List of accounts proposed to be kept in the Huzar.

ENCLOSURE No. 5.

ABSTRACT.—Register of repair Estimates framed by the Engineer Department.

ENCLOSURE No. 6.

ABSTRACT.—Register of all works under progress to enable the Collector for checking the Progress Reports received from the Taluks, and to issue necessary orders.

ENCLOSURE No. 7.

ABSTRACT.—Ledger for money debited on account of public works in the Taluk.

ENCLOSURE No. 8.

ABSTRACT.—Form of Bills for works performed, to be submitted for sanction to the higher authorities.

ENCLOSURE No. 9.

ABSTRACT.—List of works to be kept in, the Taluks.

ENCLOSURE No. 10.

ABSTRACT.—Indent of Cash required for the execution of Maramut works during the month of— in the— Taluk, Madras District.

ENCLOSURE No. 11.

ABSTRACT.—Form of Bills to be submitted from Taluks for works performed.

ENCLOSURE No. 12.

ABSTRACT.—Proposed form of Progress Report to be sent to the Huzur from Taluks.

Ed. J. Tulloch.

From J. FRASER, Esq., Acting Collector of North Arcot, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Chittoor, 23rd July 1862, No. 147.

26th May 1862, No. 3,410. In reply to the Proceedings of the Board noted marginally, I have the honor to state that I have met Mr. Dopping, the Acting Civil Engineer of the District, and discussed with him the various points mooted by the Board, and we have come to the following conclusion.

1. That the Engineer Department should retain charge of the Anikuts and the whole system of irrigation under them, i. e. main and branch channels, and tanks fed by the same.
2. That as all river channels ought to have head sluices built in order to regulate the flow of water into them, they and all tanks directly fed by them should also be under the exclusive charge of the Engineer Department.
3. That all tanks and channels not included in the above two classes, and which have been repaired within the last five years, be at once handed over to the charge of the Revenue authorities.
4. That all tanks and channels of this last class (paragraph 3) not so repaired (i. e. within the past five years) be put in thorough repair, and handed over as finished to the Revenue authorities.

That only in the event of repairs amounting to a restoration should such works again revert to the Engineer Department temporarily.

5. That all earthwork, turfing, and reveting with stone, whatever the amount, should be executed by the Revenue authorities to the works under their care.
6. That repairs to tank sluices or calingulas within 200 Rupees in amount be done by the Revenue authorities to works under their charge.

That all new masonry works, reconstruction of the same, or repairs above 200 Rupees, be entrusted to the Engineer Department.

7. That all imperial lines of road and Railway feeders with their masonry works be entirely under the Engineer Department exclusively. All District roads under the Revenue authorities, and their masonry works within the limit specified in paragraph 6.
8. That the planting of trees along lines of road or channel be under the same authorities as the works themselves are.

9. That all roads and masonry works in cantonments, and all repairs to public buildings be under the Engineer Department.
10. That the present system of accounts remain in force; the Collector sending the accounts of his expenditure direct to the Circle Office to which his District belongs.

11. The classification of tanks in this District has been made on a faulty principle, i. e. with reference solely to the number of months supply of water they contain, and not with reference to both capacity and area to be watered. They must therefore be re-classified on the latter basis.

I would propose to call all works that according to my proposal, should be under the Revenue authorities, secondary ones.

12. Bearing in mind the facts that the Taluks of this District have generally increased in size by re-arrangement, and that their establishments have been fixed at the lowest scale compatible with efficiency and present requirements, I have proposed a Maramut Establishment both for the Huzur and Taluks very similar to that recommended by Mr. Robinson on a former occasion.

13. I believe that most earthwork repairs may be done by villagers, and it is very necessary to foster this mode of executing them as involving less superintendence. Care however will be necessary in selecting contractors, and it may be advisable to entrust the works of two or three villages to one set of men belonging perhaps to a distant village. I forward a Statement showing

how the irrigation works of the District will be divided between the Engineer and Collector's Establishments. I am about to report in a day or two to Mr. Pelly on the Nirkatty Establishment for this District, which report will give part of the information called for on point two specified by Government.

14. I think that the Collector should have power to call on the District Engineer for the services of a subordinate to examine or report on any work executed by the Revenue authorities when he may have reason to doubt its having been efficiently done by his (the Collector's) Marumut Establishment.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing the proposed Marumut Establishment for both the Huzur and the Taluks of the District of North Arcot.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the number of Irrigation works in the District of North Arcot.

Edw. J. Telford.

From H. G. SMITH, Esq., Acting Collector of South Arcot, to W. HUBLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Cuddalore, 2nd August 1862, No. 150.

1. With reference to the Proceedings of the Board of Revenue dated 26th of May 1862, No. 3,410, forwarding a copy of a despatch from the Right Honorable the Secretary of State for India, communicating his decision relative to the re-organization of the Public Works Department, I have the honor to submit my report, as directed by Government Order 21st May, No. 1,106.

2. In submitting it I have of course consulted with the experienced local authorities.

3. With regard then to the first point under notice by Government, I consider all ordinary repairs of tank, sluices, and calingulahs; all repairs of irrigation, channels, their sluices and calingulahs; all ordinary repairs of revenue buildings the cost of which does not exceed 1,000 Rupees; also all small classes of new works, such as sluices, calingulahs, and irrigation channels, the cost of which does not exceed 1,000 Rupees, should be classed as secondary, and should be placed under the superintendence of the Revenue authorities for the execution of which, and to ensure the works being kept in proper repair, I am of opinion the executive agency, as shown in the accompanying Statement, is required.

4. To the class of servants called Maistries I have allotted as it might appear rather a larger salary, viz., 40 Rupees; but in that amount I include horse allowance so as only to have one item in the account. This will of course be explained to the Maistry at the time of his appointment. I estimate the keep of a horse at 8 Rupees per month.

5. The other servants that I have proposed are not I think either too numerous or higher paid than the nature of the work, the size of the Taluks, and the high price of provision demand.

6. I have also (while suggesting the executive agency) kept in mind the great evil of the system of advances which is now not known in this District, and I feel sure from inquiries I have made, need not again be introduced, provided payment for work performed is readily made.

7. The contract works done in this District are repairs of channels and tanks, ordinary road repairs, digging channels, gravel and carting it, &c. Chuanam and brick are also supplied by contract.

8. No advances are made, but the party undertaking the work is paid when he requires after the work has been measured and approved of.

9. The consequence is the work is rapidly and cheerfully done; but as measurement and superintendence should be made frequently rather a numerous executive is necessary, the small extra cost of which will, I feel convinced, more than repay the Government by the diminished cost in the work. Contract work to be done efficiently should be frequently visited.

10. On each work being sanctioned I would have the Taluk Maistry proceed to the spot and show the villagers what is required; and in the event of any one being found willing to execute it he should be brought before either the Collector, Sub-Collector, Head Assistant Collector, Deputy Collector, or Tahsildar, and then execute a simple agreement as to the number of days he would require to perform the work, and when and how often he would like to be paid.

11. There would be no need of subjecting him to any pecuniary penalty for non-performance of work, for as there would be no money paid without work previously performed, there would be no risk to either party. Any unreasonable delay would subject him to loss of contract.

12. The payment should be made after inspection, where the amount is under 50 Rupees by the Maistry; and for all sums above that, the Huzur Superintendent, Taluk Tahsildar, or Serishtadar should inspect the work.

13. With regard to the method of accounts I consider the forms in use when the present system of the Public Works Department was first introduced well adapted as they are perfectly simple and clear.

14. I enclose a list of works for the year 1861-62, by which the Board will see at once the per centage of executive agency in proportion to the works.

15. In conclusion I of course anticipate that the District Engineer will co-operate with, and give his advice to, the Collector on all works where requisite, no matter how small they may be.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing the proposed new scale of Establishment for the Maramut Department in the District of South Arcot.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the number of works of Irrigation of 1,000 Rupees under, and expenditure thereon during 1861-62.

Edw. J. Wright

From G. L. MORRIS, Esq., Acting Collector of Tanjore, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Point Calimere, 18th July 1862, No. 266.

1. I have the honor to submit the following reply to the Board's Miscellaneous Circular, No. 3,410, dated the 26th May last, relative to the proposed retransfer of a portion of the Public Works Executive to the Revenue Department.

2. As directed by the Board, I have availed myself of the experience of the District and Assistant Engineers, and also consulted the other European and Native officers in the District, who, from their position and experience, were competent to express a correct opinion on this subject.

3. The three points for consideration mentioned in the Orders of Government communicated in the Board's Circular under reply are, firstly, the extent and description of works to be placed under the Revenue officers; secondly, the executive and conservative agency required to carry out the same; and, thirdly, the method in which the accounts are to be kept locally, and are to be rendered to the Office of Audit.

4. As regards the first point, I beg to observe, that in Tanjore all tanks and communications must be considered as secondary. Of the former there are indeed very few, and such there are are not of any size or importance; whilst of the latter, the only roads which, at one

No. 1. Road from Trichinopoly to Madras by Shialli, Cuddalore, and Pondicherry.
No. 2. Road from Trichinopoly to Negapatam.

1. Coleroon.
2. Cavery.
3. Venuar.

4. Vettar.
5. Codamoorthy.

time, might have been said to be of an imperial nature were the two marginally noted; and these, since the opening of the Trunk line direct from Trichinopoly to Madras, and of the Great Southern of India Railway from Negapatam to Trichinopoly, have ceased to be anything more than mere District roads. Of the various rivers by which the District is traversed, the five noted in the margin, can alone be considered as first class rivers, the whole of the remaining innumerable channels of supply and drainage being evidently secondary.

5. After much consideration, I am not however prepared to recommend that any division of the works between the Revenue and the Engineer's Departments, should be made on the principle of a division into first and second class. If such a division were to be made, the five rivers above mentioned would have to be placed under the exclusive charge of the Department Public Works; while the numerous branches springing therefrom, with all the masonry works connected therewith, would be under the Revenue officers. Such an arrangement would, I feel convinced, be practically attended with the greatest inconvenience, and lead to frequent collisions between the subordinate agencies of the two Departments. As the Board are well aware, the District is covered with a vast net work of branch rivers, and channels of irrigation and drainage, each more or less depending on, and influenced by, the other, and the evil likely to arise from a division between two different Departments, of the duties relating to the maintenance and conservancy thereof, and of the responsibility attaching to the same, is but too self-evident. Furthermore, it is to be observed that it is the repair and restoration of the embankments of such large rivers as those above specified, which require that energetic action and that command of the aid of the villagers, which are the recognised characteristics of the Revenue Department; and it has been in these cases, viz., the closing of breaches, that the assistance of the Revenue authorities has in fact been repeatedly afforded since the transfer of the Public Works Executive to the Engineer's Department. I would, therefore, propose that the division of the works should be made on a different principle, which I will proceed to explain.

6. I would, in the first place, divide the whole of the operations of the Department Public Works, embracing all classes of works as "Irrigation," "Conservation," and "Buildings," into three different heads: viz., firstly, the framing of projects, including the preparation of Plans and Estimates; secondly, the execution of work; and, thirdly, the superintendence of construction details and the examination of the work executed. The duties falling under the first and third heads, I would entrust to the Department Public Works, with the exception of masonry works, under Rupees 250, and earth and other works under Rupees 500, both of which should be left entirely to the Revenue Department. The duties relating to the second head, viz., the execution of work included within its scope, also the keeping of accounts locally, I would propose should be thus divided between the two Departments.

REVENUE DEPARTMENT.

1. Repair of works of all descriptions with the exception of harbours, navigation canals, and locks and jetties, and groynes on the sea.
2. All new earth-works with the exception of diversions of, and straight cuts in, large river channels, as also the execution of new channels of the length of a mile or upwards.
3. All new works of masonry costing less than Rupees 1,000.

DEPARTMENT PUBLIC WORKS.

1. All works whether repairs or new works, connected with harbours, navigation canals, and locks and jetties, and groynes on the sea.
2. New earth-works of the following descriptions:—
1st. Diversion of rivers and channels.
2nd. Straight cuts in do.
3rd. Execution of new channels of the length of a mile or upwards.
3. All new works of masonry of the estimated cost of Rupees 1,000 and upwards.

7. By this arrangement, it will be seen that, while the executive details of all minor and ordinary works are entrusted to the Revenue Department, those which more essentially require professional skill are left in the hands of the Professional Department. In Tanjore the greater part of the works executed are of a minor nature though they require but little professional skill, yet they contribute very largely to the preservation of the revenue and to the welfare of the people, and there is no doubt that, if the Revenue Department is capable of executing any work well, this is the class which is particularly adapted to that Department.

8. While the relative functions of the two Departments are thus defined, there will be but little room for that clashing between the subordinate agencies to which I have alluded in paragraph 5. Each Department will act by itself without any conflicting interests. An Overseer prepares a plan and estimate for a sluice, and when they have received the sanction of the higher authorities, the Tahsildar or his Revenue subordinates sets to work with it. The former will, of course, go and see how the work is going on, but as he has only to do with the professional details of construction, he will have no object in thwarting the progress of the work. It is true that the arrangement above proposed provides for certain large works being executed by the agency of the Department Public Works, but these will be but few in number, and but seldom in situations where the Revenue authorities are likely to be carrying on works at the same time. I mention this, as one of the objections started has been that the Engineer Department will never be able to get labor if the Revenue authorities should require it at the same time and place.

9. There is one point connected with this part of the subject to which I consider it highly desirable here to advert. It is the examination and checking of the work executed, and the expenditure incurred by the Revenue Department. In paragraph 6, I said that I would entrust it to the Department Public Works. By this I meant, however, the

European portion of that Department: the more the European officers examine and report on the execution of works, the better will they be executed, and the more likely will the Revenue officials be to learn their duty well; but I would deprecate in the strongest terms, any examination or checking of the work done by the Revenue Department by the lower subordinates of the Engineer's Department. It is certainly desirable that the work done by one Department should be tested by another, but then the examiners must be above suspicion or doubt. I have no hesitation in saying that, if the subordinates of the Department Public Works are once allowed to examine and report on the work performed by our Department, every thing will come to a stand still, and the time of the Collector and of the District Engineer be taken up in settling disputes amongst them. Even formerly when the executive rested with the Revenue Department, the evil arising from the interference of the lower subordinates of the Engineering Department was keenly felt, although no voice was raised against it. It was then notorious that a certain percentage of the actual cost of the work had, at the sacrifice of the Mirasidars and others, to be set apart, either to meet the arbitrary retrenchments of those parties, or for the purchase of their acquiescence. I write strongly, as I am speaking of facts of which I have had personal experience.

10. With regard to the second point, viz., the agency required by this Department, I beg to enclose a Statement showing the Establishments which, on a mature consideration, I think absolutely necessary. The aggregate cost of these may perhaps appear, at the first sight, rather large; but my experience in the District fully warrants me in stating, that what I have proposed is nothing more than what is strictly and indispensably necessary for the efficient management of the works and the accounts proposed to be placed under this Department.

11. In judging of the agency which the Revenue Department may require for conducting the Department of Public Works, the strength of the separate Maramut Establishment, which was formerly attached to it, is only too apt to be adverted to; but it is, I submit, only just to this Department that all the facts which then existed should, at the same time, be taken into consideration. The Establishment referred to, was, as the Board are doubtless aware, not equal to even a tenth part of the enormous quantity of the Maramut work which the Revenue Department used to perform. It is true that the work was done, but this was only accomplished by the entire Revenue and Police agencies being employed indiscriminately in all branches of the administration. Now, however, with the increased size of Taluks, and the reduced number of hands, such an arrangement is simply impossible.

12. The Statement of the proposed Establishments, it will be seen, does not include any Establishment for the conservancy of works of irrigation and for the distribution of water. There is, at present, an Establishment termed "Niranikam," maintained under the control of the Department Public Works at a monthly cost of Rupees 352-10-0. If this be transferred to this Department, no further Establishment will be necessary for the purposes above indicated. The Establishment referred to is, however, only maintained at the heads of rivers, and its operations are therefore confined to watching the anicuts and river bunds at these localities, and to opening and closing the sluices as occasion may require from time to time. Besides this, a permanent staff of Kavalkars, or watchmen, placed over different sections of different rivers down to their terminations, would certainly, to a great extent, tend to the stability and security of the banks; but I have not at present before me sufficient materials for framing a plan for the same. Such Establishments however can be provided annually under ordinary estimates, as indeed they are at present, to some extent, are. With the Niranikam Establishment above alluded to, the charge and control of the anicuts, and other works at the head of rivers should, I conceive, be likewise re-transferred to this Department. I am free to admit the great importance attached to the due preservation and efficient management of this class of works, and I would therefore have them periodically inspected by professional officers, in order to such repairs and improvements as may

be found necessary being executed upon plans and estimates prepared by them; but the distribution of water remaining in the hands of the Engineer Department is, in my opinion, an anomaly. It can be regulated only by the wants and requirement, of the cultivating classes, and the Revenue authorities, in consequence of their close and daily intercourse with those classes, certainly are the most capable of forming a correct opinion regarding those wants. In the neighbouring District of Trichinopoly, these functions are entirely in the hands of the Revenue officers.

13. With respect to the details of the Establishment proposed, I beg to offer some explanation, and to show how I propose to employ it in the different branches of the Department. In the first place I would observe, that the Tahsildar is not now what he formerly was when the Maramut executive rested with the Revenue Department. The size of each Taluk is now twice as great as it was before, if not more; the introduction of the Penal and Procedure Codes has rendered it impossible for him to go travelling about the country looking after Maistries and Amins, whilst the extended powers which are about to be given him under the new Revenue Code will make his office work heavier than ever. It is consequently out of question that the Tahsildar can efficiently superintend the executive details of public works, although his intimate acquaintance with the wants and requirements of the people, the command he has over them, and the general influence of his position as the head of the Taluk, may doubtless be brought to somewhat aid in the successful working of the Department Public Works placed under his charge.

14. To meet such a state of things as this, I propose to form a distinct executive agency for each Taluk, composed of a Superintendent, one or two Maistries according to the size and importance of the Taluk, a Gumastah, and a small number of Peons and Lascars as particularized in the enclosed Statement. In addition to the persons included in the Statement, I also intend all the Mahanam Nat Kurums to be used as Amins. They are a very experienced class of public servants, and will do this kind of work admirably.

15. The Superintendent I purpose should be an Overseer, or some other person who has passed a professional examination. He will be placed at the head of the Establishment formed as above, and will be the head Maramut officer of the Taluk; he will however, except in matters of professional details, be completely subordinate to the authority of the Tahsildar. It will be the duty of the Superintendent, as also of the Maistry placed under his orders, to prepare plans and estimates for all works to be undertaken by the Revenue Department, to superintend the execution of work, and to measure and examine the same when executed; while the Amins will each take charge of one of the Mahanams, or Sub-divisions into which each Taluk in Tanjore is subdivided. The duties of these latter will consist in collecting labor and materials (except where the work is given on contract), and in keeping accounts. These Amins, except in matters of account (wherein they will be amenable to the Tahsildar alone), will likewise be placed under the general control of the Superintendent.

16. The actual cost of the Establishment, I propose, will be 2,007 Rupees per mensem. In addition we shall have the services of 113 Mahanam Nat Kurums as Amins. If the Board should approve of this proposition, I beg to point out that it will be necessary for them to modify the plan recommended by Mr. Pelly in paragraph 17 of his letter to Government dated 7th December 1861, No. 1,117, for the services of the Mahanam Nat Kurums being dispensed with at the end of June 1863.

17. With respect to the third point set forth in the Orders of Government, viz., the method in which the accounts are to be kept locally, and to be rendered to the Office of Audit, I would observe that, as the defects which existed in the forms formerly in use in the Department Public Works have been remedied by the new Code of the Department Public Works, I think that, with the modifications and improvements now introduced, the forms of the chief accounts, viz., Bills, Progress reports, Station books, Cash books, and Accounts current, may, with advantage, be adopted.

18. The following is the mode in which I would recommend the accounts to be kept by the successive grades of the Maramut agency as proposed to be organized. Each Amin, who is placed in charge of an executive range or Mahanam, will keep a Station book for each considerable work or set of minor works, according to Form No. 8, appended to Chapter XVIII of the new Code referred to, together with a Cash book for the whole range according to Form 10, appended to the same Chapter. From these will be prepared a monthly Progress report in the form now adopted by the Range Officers of the Department Public Works, for submission to the Tahsildar, and this (with certain improvements which I will propose presently) will answer every purpose, and no other Periodical return will be necessary except the quarterly and final bills for works as prescribed in Chapter XX. From the Progress reports thus received from the different executive Amins, the Tahsildar will compile his general Progress report, for submission to the Huzur every month, and besides this, he will also keep a general Cash book for the whole Taluk according to the new form already mentioned, from which can be prepared monthly a general Account current, or a general abstract of Receipts and charges on account of Public Works, for submission to the Collector. Bills will be submitted by the Tahsildar from time to time as they are received from the executive Amins, and in like manner they will be furnished to the Collector also by the members of the Engineer's Department.

19. The improvement in the form of the Progress report, of which mention has been made above, is as follows:—To the several columns of the present form, there should be added a new one showing the "amount of cash received for works" in the whole range, or in the whole Taluk as the case may be. This, balanced at the bottom with the column of "Expenditure in the current month" already existing, would show the balance of cash in hand at the end of the month, and in the Return of the following month, it would be again carried forward and entered at the head of the new column therein opened as above.

20. The Taluk Superintendent and Maistries should submit to the Collector monthly through the Tahsildar each an Inspection report according to the Form No. 11, appended to Chapter XIX of the new Code, besides the batches of estimates prepared by them from time to time. These latter should, as a rule, be submitted once for all in the shape of a general Return (with separate details for each estimate) within a given date before the commencement of the working season. They should include all works of an ordinary nature, the necessity of which could be foreseen, and any which it might be found necessary afterwards to prepare in the course of the season, would be submitted in the form of supplements. Every estimate submitted to the Huzur for orders, will of course pass through the Tahsildar, and will be accompanied with such remarks as that officer may have to offer with regard to the necessity or otherwise of the work. The Returns to be transmitted by the Collector to the superior authorities may be the same, and in the same forms as those now submitted by the District Engineer.

21. With reference to paragraph 2 of the Board's Order under reply, I would beg to observe that, although the system of advances therein alluded to cannot, under all circumstances, be dispensed with, yet I am of opinion that, by a judicious management, the evil consequences of the system can, to a considerable extent, be guarded against. Where the villagers are directly interested in the execution of the work, as for instance, the clearing of the irrigating or drainage channel, and the construction or repair of a tank or channel sluice, the work can, and always should, be executed, whether on contract or under Amini superintendence, without a previous advance, and the value of the work done be afterwards paid on measurement. Again, in cases of pure earth works which only require labor, such, for instance, as the repair of river embankments and roads, the same course can also be adopted, even where the villagers are not directly interested, by calling upon them to furnish the requisite labor in the first instance, and then to receive payment as a certain quantity of work is done and measured. Nevertheless there will doubtless be cases in which either from the indifference and apathy of the villagers, or the want of union amongst them, much difficulty will have to be experienced in getting a supply of labor; in such cases as these, as

also in masonry works undertaken for the general benefit of the District, and in which the Mirasidars of no particular village or villages are directly interested, a previous advance will be indispensably necessary whether the work be done on contract or otherwise. In these cases, as there will no help for it, an advance will have to be made, but I would, on no account, allow it to be done without the Collectors or one of his European Assistant's written sanction; thus making the European Officer responsible that men of straw did not receive advances: with this rule strictly acted up to, I do not imagine that the system of advances will last very long in any District.

22. The Board have requested me to state fully any difficulties that may present themselves in this matter, and I will therefore proceed to do so.

Firstly.—The Collector and his European Assistants in this District will not be able to efficiently superintend any public works which may be performed by the Revenue Department. It is true that they did so formerly, but at the best they did not do it thoroughly well, and now that the Procedure Code compels them to personally examine all Magisterial cases committed to them, they have but little time for other work as in former days. I must also add that it appears to me to be an anomaly to make an unprofessional man superintend a professional work, the best intentions will go but a very short way towards correcting the blunders committed in consequence of the want of a professional training. Again, however simple and however admirable the system of accounts may be, the Collector can but seldom do more than sign them. He will never have time to scrutinize them thoroughly, and I hardly suppose that he will be expected to do so.

Secondly.—The above remarks apply still more forcibly to Tahsildars. It was always formerly a notorious fact that those Tahsildars who were good Maramut officers almost invariably neglected their Magisterial work, and very often their revenue also. I myself recollect two, who when questioned regarding any Magisterial case in their Taluks, frankly confessed that they knew very little about it, because the Javabneiss had taken down the depositions, whilst they had been away looking at a bridge or road. Such a way of doing business cannot be tolerated now; the Procedure Code compels Sub-Magistrates to take down a Memorandum of the substance of what each witness deposes as the examination proceeds, and the Sub-Magistrate is therefore obliged to be present. I do not see therefore how the Tahsildar can possibly do more in future than nominally superintend any public works done by the Revenue Department.

Thirdly.—During the time that the Department Public Works have had the executive in their hands, the Mirasidars and Ryots have gradually been falling out of the habit of procuring labor and giving assistance generally as they used to do. I therefore anticipate that work will not be nearly so easily done now as used to be the case. A Mirasidar will help when he is personally interested, but otherwise, I am afraid that he will be but too inclined to stand aloof, and let us do as best we can.

Fourthly.—The Board will observe that I have written strongly in paragraph 9, against the subordinates of the Department Public Works being allowed to examine and report on works executed by the Revenue Department. I feel that every thing must come to a dead lock if such a system is allowed, and therefore say so, and yet I am fain to confess that I know many works will consequently not be examined which would have been all the better for having undergone a scrutiny.

Fifthly.—I am afraid that the good feeling which ought to exist between the Revenue Department and the Department Public Works, will not be increased by our taking charge of certain works. The jealousy which once existed, and which did so much harm, has, of late, been dying out, but I don't see how it will be possible to prevent its now being again revived. It is a deplorable evil, but it is only one of the natural results of our again taking charge of any part of the executive.

23. In conclusion, I trust the Board will not consider that I have started difficulties in order to avoid being saddled with more work and responsibility. I have stated them at the Board's own request, and whilst expressing my willingness to obey any directions given me, I leave it to them to decide whether the good gained will not be more than counterbalanced by the evils created. I am of opinion that it will.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing the Establishment required to be entertained in the District of Tanjore, for the executive superintendence of the public works proposed to be placed under the charge of the Revenue Department, as also for keeping accounts.

Erd. J. Tulloch.

63
From J. R. McDONELL, Esq., Collector of Trichinopoly, to W. HUGLESTON, Esq., Secretary
to the Board of Revenue, Madras, dated 11th July 1862, No. 127.

1. I do myself the honor to reply to the Board's Miscellaneous Circular, No. 3,410, dated the 26th May last.

2. In Statement A which accompanies this letter, I have shown what works will be placed under the Revenue Department, and those which will be retained by the Department Public Works. All trunk roads and main lines leading to important towns beyond the frontier of the District, I have classed as "Primary." In determining what are secondary tanks and channels, I have been guided by the size of each work, its importance, and the amount of revenue dependant on its irrigation. All the more important channels leading direct from the Cauvery, I have treated from the head "Secondary;" all branch channels leading from the main Voikals, I have treated as secondary works. Revenue buildings, whether new works or repair, I have assumed will come under the Collector's management.

3. Statement marked B shows the number and salaries of the Executive Agency, that will be required. In drawing out this Statement, I had the advice and experience of Captain Palmer, and Mr. Puckle to assist me; and I was also further aided by the opinions of the most experienced Revenue subordinates in this District. I have borne in mind the increased area over which Tahsildars now have jurisdiction; the reduced strength of Taluk Establishments, and the heavy work entailed on Tahsildars as Taluk Magistrates under the new Code, and I think I could not reduce my proposed Establishment in any one particular, without impairing its efficiency.

4. In this District we have at the present moment a Conservancy Establishment for some of our large irrigating channels; this Establishment was by the orders of Government in July 1860, transferred to the Revenue from the Public Works Department, and under the change of system, it has worked well and advantageously to both the Ryot and Government, and a heavy correspondence between the Revenue and Engineer's Department has been avoided; the general conservancy of all other works of irrigation is now in the hands of the village officers. I therefore do not see the necessity at present for my recommending any separate Establishment being formed.

5. The accounts both local and those to be sent to the office of Audit for Public Works, are given in Statement C.

6. Referring to paragraph 2 of the Board's Proceedings, I would beg to state that I am of opinion that the system of advances cannot be wholly stopped, it must be a gradual change, and much has already been effected in this direction by the present Public Works Department; this evil of advances may be in a measure obviated by entrusting work to the villagers immediately interested in its efficiency; but experience shows that this check cannot always be relied on as effective.

7. The difficulty which presents itself to me in this matter, is the grave objection there will be to two Departments going into the market for labor; both perhaps working in the same locality, there will always be jealousy among the lower grades of the Departments, however amicable the heads may be; thus I think the price of labor will rise, and constant squabbling between the subordinates in the two Departments will be the result; there will also be a difficulty in checking the work performed under the superintendence of the Revenue Department. I would propose to leave the Maramut Superintendent's passing of the work as final; if works are all first to be examined by a subordinate in the Department Public Works, I fear that there will be much ill-feeling; of course officers in charge of ranges would retain full power to measure any work and report whether it was satisfactory or not.

ENCLOSURE No. 1, A.

ABSTRACT.—Statement of works to be placed under the Revenue Department, and of those to be retained by the Department Public Works.

ENCLOSURE No. 2, B.

ABSTRACT.—Proposed scale of Establishment.

ENCLOSURE No. 3, C.

ABSTRACT.—Memorandum of accounts.

Exd. J. Tulloch.

From V. H. LEVINGE, Esq., Collector of Madras, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Kodaikanall, 23rd July 1863, No. 143.

1. With reference to the Board's Miscellaneous Circular No. 3,410, dated the 26th May, I have the honor to report that having consulted all my Tahsildars and experienced subordinates on the subject of the transfer of the Conservancy, and repairs of minor public works, to the Revenue Department, I find that all are in favor of the change with the exception of one Tahsildar.

2. I am decidedly against the change, and do not see how the Tahsildars, even with the help of a Public Works Establishment, can possibly efficiently superintend the execution of the works; they did not do so before, when they were charged with their execution, and they have no greater ability now.

3. The Tahsildars have lately been relieved of General Post Office, Public Works, and Police duties.

4. The relief from General Post Office duties was more nominal than real; all Tahsildars had not such work, and those who had found it not burdensome.

5. Since the introduction of the new Police, and the Criminal Procedure Code, the amount of work to be performed by a Tahsildar has increased rather than diminished. When head of Police, he did no actual police work himself, that was left to his subordinates, he received reports and gave orders on them; some times proceeding to the spot in cases of grave crime, he does the same now, he receives reports of crime, has to put himself in communication with the Police, and is expected to assist, and urge them towards detection; he has to go to the site of all grave crimes at once, and has to take all the deposition himself, taking down notes in his own handwriting; formerly he could do all this, and frequently did it, through his sub-officer of Police, whom he could also send to hold inquests, now he must go himself, wherever the Police consider the presence of the Sub-Magistrate necessary; under the Criminal Procedure Code; the Tahsildar as Magistrate has more work to do, his powers being extended, and he must give his personal and undivided attention, to cases under inquiry for committal, and to those to be disposed of by him, he cannot now as formerly occupy himself in other work on one side, while a criminal Clerk was taking down depositions in another; so much is now required of a Taluk Magistrate, that unless some relief in his Magisterial duties is afforded, I am sure that a Tahsildar will not be able to superintend the execution of public works, in addition to his general Revenue duties.

6. Superintendents of Police, who have watched Taluk proceedings, have informed me that the Tahsildars now have more work than they can properly supervise, it will be worse if they are further burdened, and under the proposed new Revenue Code, it is contemplated to give them jurisdiction in cases now only triable by the Collectors.

7. If it is determined to put the execution of all minor works under the Tahsildars, there must be an addition of four Sub-Magistrates made to the Taluk Establishments of this District.

8. The Dindigul Taluk is over 1,000 square miles in extent, and is composed of the old Taluks of Tadicombo and Nellacotta, this Tahsildar must have the assistance of a Sub-Magistrate. The Taluk Serishtadar in the absence of the Tahsildar on public works duty will not be able to answer the calls of the police and fulfil the Tahsildar's Magisterial functions in addition to his own duties in the Account Department.

9. The Taluks of Meilur, Periacolum, and Palany are also large, and will require Sub-Magistrates. The Sub-Magistrates will require each one Clerk, as the Tahsildar will have to take one with him to carry on current work in the lengthened circuits, he will have to take visiting works.

10. My subordinates agree that they cannot undertake the works without an Establishment costing at least 8,160 Rupees a year, to which must be added the pay of the extra Sub-Magistrates and their Clerks, costing 2,976 Rupees a year, total 11,136 Rupees, independent of the pay of

the Engineers, and their Establishments, who will have to frame the necessary estimates and examine the works after completion, so that not much will be gained in an economical view of the Establishment for the execution of public works by the transfer, and as to efficiency the fact that the revenue derived from the irrigated lands has yearly increased since the transfer, shows that at least in that view the present system has not failed.

11. Referring to the first point specified by Government, I am of opinion that in this District all the tanks and channels may be classed as secondary, there are no great channels, as in Trichinopoly, Tanjore, or Tinnevely. The two great anicuts across the Vygay called the Chittanay and Peranay, and the anicuts across the Soorily should have any extensive repairs required, executed by the Engineer's Department, those anicuts may be called first class works.

12. Buildings costing 500 Rupees may be built by the Tahsildars, all costing over that sum should be built by the Engineers, but all petty repairs can be executed by the Revenue officials.

13. Trunk and Cotton roads should be constructed, and all hull passes and ghats, by the Engineer's Department, and should be kept in repair by them.

14. The Trunk roads are the Madras, Dindigul, and Palany roads, the Cotton roads are the roads between Palknoot and Trimangalum and from Madura to Tuticoreen *via* Arappacotta.

15. District roads can be constructed and kept in repair by the Tahsildars, provision being made in the estimates for the necessary responsible road Overseers; stone platform bridges of almost any size can be built on such roads by Tahsildars, but arched bridges should be built by the Engineers.

16. The roads in the Zemindaries of Ramnad and Shevagunga leading into the interior from the coast must be under the Engineer's Department, as there are no revenue servants to look after them, with the exception of short portions near the salt pans which can be repaired, &c., by the Salt Deputy Collector.

17. The information called for in the second point is given in the tabular Statement accompanying this report. The watchers at present employed on the Peranay, a large anicut on the Vygay, whose duty is simply to open and shut the sluices, for the distribution of water, and clearing away of land, should I think be under the orders of the Tahsildar of Madura, in whose Taluk it is situated though the anicut is to be considered a first class work and to remain in charge of the Engineer; the villagers are now put to great inconvenience by having to go some times a great distance to get any redress from the Executive Officer in charge.

18. As regards the conservancy of the irrigation sources, and the regulating the distribution of water, I am of opinion that the number of Niganties I have proposed in a Statement forwarded to Mr. Honorable Pelly on the 24th instant is quite sufficient, but I have proposed four watchers for the Nellyoor channel in the Madura Taluk. The channel is 20 miles long and supplies one of the finest tanks in the District, but it is rarely filled as the villagers cannot be got to unite in sharing the expenses of keeping men along the channel, to prevent the different villagers through whose limits it runs from wasting the water and trespassing on the banks.

19. With reference to the keeping of the accounts and submitting bills for audit to the Office of public works, both Tahsildar and Collector must keep distinct accounts for each work showing date of sanction, amount to be expended, dates and amounts of advances, particulars of advances whether for wood, chunam, bricks, cooly labor, &c., date of completion, date of final examination by the Engineer Officer, date of submission of bill to Collector, and date of audited bill should be added in Collector's list; at the end of each month the Tahsildars must send in to the Collector in duplicate a list showing the amounts required during the following month for each work, one copy will be countersigned by the Collector and returned to the Tahsildar, which will be his authority to make payments. This authority only to last for the month for which it was passed; at the end of each month the Tahsildar must send in an account particular showing the amount paid from his Treasury on account of each work. All payments made by the Tahsildar must be

by cheques on his Treasury which must be submitted monthly with his account current which together with the account particular of expenditure will enable the Collector to keep a check on the Tahsildar's expenditure.

20. As soon as a work is reported completed by the Taluk Maistry, the Tahsildar should prepare a bill of the expenditure on it, this bill should be on a printed form showing all particulars of sanction and amount which he should forward to the Collector, who will sign it, and send it on to the Engineer with a request to examine the work; the Engineer having done so will countersign the Bill, and return it to the Collector, who will forward it for audit.

21. So far all is easy enough, but how are differences to be settled, when the Engineer refuses to pass fully the Tahsildar's bill, who is to be the referee in such cases; it will often happen that the full amount of the expenditure has been incurred and the work done, but the District Engineer will disallow items such as for ramming not properly done, pits not to be found, because perhaps filled in by a flood or ploughed over, the Engineer will not be able to make his measurements agree with those of the Taluk, and will refuse to pass the amount, how is the Tahsildar to get the work done over again perhaps or recover the amount paid to the workman. The Tahsildar will be ordered to collect or refund the money, and this will lead to the old system of a certain per centage on all works being surreptitiously withheld to make good all such eventualities, bringing into full blow again all the evils of the old system harassing and tempting to evil good men who wish to do right.

22. Advances cannot be got rid of. I fear the Engineer's Department cannot now get on without them, but they are able to check them as they constantly go round the works and will not make fresh advances, till the value of the former is worked out; the Tahsildar can hardly exercise the same supervision, and must therefore make heavy advances at once or trust very much to the reports of the Maistris as to the forwardness of works; but of course every effort will be made by the Revenue authorities to get work done by contractors and by the villagers without advances.

23. I was not able to send in this report within the ten days allowed, as I had to send to Madura for information, because all the Tahsildars had not sent in their reports, and because, when the information reached me, I was out at Mannavanur on the hills.

ENCLOSURE No. 1.

ABSTRACT.—Abstract of Maramut Establishment as it stood on the 30th April 1857 and as now proposed.

Exd. J. Wright.

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ENCLOSURE No. 1.

ABSTRACT.—Abstract of Maramut Establishment as it stood on the 30th April 1837 and as now proposed.

Exd. J. Wright.

69
From J. SILVER, Esq., Collector of Tinnevely, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Tenkasy, 18th July 1862, No. 293.

1. With reference to the Miscellaneous Circular from the Board of Revenue, under date the 26th May last, No. 3,410, communicating the Order of Government relative to the re-organization of the Department of Public Works, and calling for information on certain points, I have the honor to report as follows.

2. As regards query No. 1 as to the exact extent and description of works to be placed under the Revenue Officers, I beg to state that in this District almost all the irrigation works on which the Land Revenue chiefly depends are small and very numerous, and as it is a matter of great importance that these works should be kept in a state of efficiency, and as they are not now considered to be in so efficient a condition as formerly, I am of opinion that the construction and repair of all these works should be re-transferred to the Revenue authorities without reference to classes. It would be difficult to classify "secondary" tanks for example, among the 3,000 tanks in Tinnevely, and as I am of opinion with regard to this District, that all works of irrigation without reference to class on the Acting District Engineer to define what tanks, &c., may be considered to be represented by the term "secondary." Channels and communications should in like manner be placed under the Revenue authorities.

3. But new works of magnitude such as the ancient now sanctioned by Government to be constructed across the Tambrapoorny river and Streevygoontam should be entrusted to the Public Works Department, as well as the construction of *Trunk* roads, large bridges, and buildings; all minor new works, communications and repairs, being left under the control of the Collector.

4. With reference to query No. 2, I beg to state that the works of irrigation situated in the four Taluks named in the margin* being more numerous than in the other Taluks, I consider it necessary that each should have three well trained and qualified Maistries, and two Gumastahs, with 10 Peons, and that the remaining five Taluks† should be furnished with two Maistries, two Gumastahs, and six Peons each.

* Tinnevely.
Ambasamudram.
Tenkarai.
Nanguneri.

† Tenkasy.
Shenkernarecoil.
Streevilliputtur.
Sattoor.
Ortapedaram.

5. At the Huzar Cutcherry an Establishment consisting of one Manager, one English Clerk, one Vernacular Clerk, and two Vernacular Accountants, with two Attenders, should be entertained for supervising the accounts received from the Taluks, and for preparing monthly Statements and other periodical returns. The accompanying Statement No. 1 shows the pay of the proposed Establishment, which in my opinion is absolutely necessary for the efficient management of the Maramut Department, as great changes have been made in the strength of the Taluk Establishment, and as the servants of the Taluk cannot be called away from their defined duty for employment on public works, as had been the case formerly without interfering with their other duties.

6. As regards the Conservancy Establishment of channels and tanks, * Marked Nos. 2 and 3. I beg to enclose copies of the Statements* forwarded to Mr. Pelly with my report on the revision of the Village Revenue Establishment.

7. In reply to query No. 3, I beg to forward a list No. 4, showing the accounts to be kept in the Huzar and Taluks, and those to be rendered to the Office of Audit for public works; and Bills for works should in my opinion be submitted for sanction, as they are completed.

8. With reference to paragraph 2 of the Circular under reply, I beg to state that their appears to be no objection to advances in small sums being made to Merassidars once in 15 days. Before a second advance is made, the work executed to the extent of the first advance should be inspected and examined by the Maramut servants. The adoption of the above mode of making advances for the execution of public works is necessary to ensure speedy completion of the works entrusted to villagers who are immediately interested in their efficiency, especially as much diffi-

culty is at present experienced in procuring labor, consequent on the emigration of labourers from this District to Ceylon, the enlistment of persons in the new Mofussil Police, and the employment of coolies in Coffee Gardens on the Hills in this District.

ENCLOSURE No. 1.

ABSTRACT.—List of Maramut Establishment to be entertained in the Huzur and Taluka.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the cost of present and proposed Establishment of Neergan-
ties in the several classes of tanks in the District of Tinnevely.

ENCLOSURE No. 3.

ABSTRACT.—Channel Establishment.

ENCLOSURE No. 4.

ABSTRACT.—Accounts to be prepared in the Taluka.

Ed. J. Tulloch.

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From P. GRANT, Esq., Collector of Coimbatore, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated 19th July 1862, No. 148.

1. I have the honor to acknowledge the Board's Miscellaneous Circular of the 26th May 1862, No. 3,410, giving cover to a Despatch from the Right Honorable the Secretary of State for India, and the Madras Government Order thereon, dated 21st idem, No. 1,106, and requiring a report at as early a date as the careful consideration of the subject will allow, on certain points connected with the proposed re-transfer to the Revenue Department of the Executive Agency of the Public Works.

2. With a view to obtain the opinion of experienced and intelligent local Native and other subordinates, I wrote to my Sub and general Deputy Collectors as well as to the Tahsildars. The only report I have yet received, is that from the Tahsildar of Coimbatore, and I shall have to wait some time before the reports of the others are received, but as the Board have, in their Circular of the 4th instant, No. 4,322, which reached me on the 9th, directed that within ten days from the receipt thereof, my report should be submitted to the Board, I lose no time in offering such views and opinions as I have formed after consulting the records, and the few experienced native subordinates in the Huzur, and availing myself of the experience of the District Engineer Captain Goddard.

3. The first point on which information is required by Government, is the exact extent and description of works to be placed under the Revenue Officers, and the definition of the class of tanks, channels, and communications which may be considered "secondary."

4. The various works demanding the attention of the Public Works Department at present may be classed as follows:—

(1.) Irrigation Works.

(2.) Roads and Bridges.—Under the former head are included anicuts, head sluices, calinga-lahs, channels, and tanks. A Statement showing the number of anicuts, channels and tanks under each source of irrigation, and the extent and revenue of the land under the same is enclosed. It will be observed that there are no large and important works like those in the Godavery and Kistna Districts, so that almost all that do exist, may be

* There are two channels branching from this anicut. One is called Tadapully channel and the other Araken-cottah.

classified as "secondary." There are but two anicuts of any importance, viz., Codevery* and Calingaroyen across the Bhowany river. These were built before the province came

under the British rule, and do not demand great Engineering skill to execute any repairs that they may require. Captain Goddard, the District Engineer, agrees with me that they can be kept in order by the Revenue authorities with the professional aid of the Engineer, on the occasion of any emergency arising. These as well as the other minor anicuts under the Noyel, Ambravatty &c., were always under the Collector's Department previous to the formation of the Public Works Department, and can now be kept in order by the Revenue authorities. The principal points requiring attention are the distribution and correct regulation of the supplies of water when the cultivation is being carried on, and the clearing of the channels from all accumulations of sand and alluvial deposit after the freshes have subsided. The Tahsildars, who are interested in the due cultivation of the lands and the realization of the revenue, are not likely to let them be neglected. From their position and influence also they are enabled to enlist the energies of the Ryots in the work with much greater ease than the Engineer's Department is now able to do. The head sluices of the greatest size are those of the Tadapully and Calingaroyen channels, which can be kept in repair by trained Maistries, assisted with the professional aid of the Engineer, when such is required. There are no large tanks in the District; the repairs which they need are generally simple, such as, the closing of breaches, the raising and strengthening of their bunds where necessary, the re-building of injured sluices, and the clearing of supplying channels. In fact the irrigation works of this province are simple, and can all, I believe, be taken charge of by the Revenue authorities with a fair prospect of being kept in efficient order.

1. Trunk road between Malliar and Bhowany.
2. Road from the Coimbatore Railway station to the foot of the Neilgherry Hills.
3. Road from Matapolliem to Trichinopoly via Avenashy Konghiem and Caroor.
4. Road from Coimbatore to Dindigul via Pollachy and Oodoomalpettah.
5. Road from Coimbatore to Konghiem via Pulladam.
6. The Coonoor, Seegoor, and Kotagherry ghauts and roads and all station roads on the Hills.

5. The charge of roads, those marginally noted being excepted, can be placed under the Revenue Department. The selection of these exceptions has been made by Captain Goddard, the District Engineer, who knows their requirements far better than I, who am a stranger to this District, do. All large bridges should of course be under the Engineer.

6. The proposition then is—

- (1.) That all irrigation works and minor roads be under the Revenue authorities.
- (2.) That the aforementioned roads and large bridges remain under the direct charge of the Engineer's Department.

7. The next point for consideration is the number and salaries both of the executive agency, which will be required to carry out the works undertaken by the Revenue Department, and also of the Conservancy Establishments necessary to watch the irrigation works and regulate the distribution of water to the lands. The Board are well aware that previous to 1850, the year in which the executive agency was transferred to the Engineer's Department, the Tahsildars superintended all new works and repairs aided by a Taluk Maistry, and a large staff of Revenue Peons. Since the re-arrangement of Taluks under Mr. Pelly's order, and the introduction of his scheme of Revenue Establishment, the jurisdiction of each Taluk has been greatly extended, and the number of Peons considerably reduced; consequently no Tahsildar will be able to carry on the public works without a sufficient staff of Maistries and Peons, as well as Gumastahs to write the several accounts connected with them. With this view I propose to employ an Establishment under each Tahsildar determined with reference to the size and importance of each Taluk according to the following scales:—

For a large Nunjah Taluk.

	RS.
1 1st Class Maistry, salary	40
Horse allowance	10
	50
1 2nd Class Maistry, salary	30
Horse allowance	10
	40
1 Gumastah	20
1 Do.	15
10 Peons at 5 Rupees each	50
Sadirwarid	5
	180

For a Taluk where the Nunjah revenue is not large, or where the extent of the Taluk is limited.

	RS.
1 2nd Class Maistry, salary	30
Horse allowance	10
	40
1 Gumastah	20
8 Peons at 5 Rupees each	40
Sadirwarid	3
	103

There are four large Taluks in the District, viz., Coimbatore, Sattinangalam, Parendooray, Caroor. The pay of the Establishment to be employed in these Taluks at 180 Rupees each, is Rupees 720, and that of the other six Taluks at 103 Rupees each, is Rupees 618, making in all Rupees 1,338 per mensem. As the Engineer will, after the re-transfer of the Public Works to the Revenue authorities, be merely an Executive Officer in respect to the works to be retained under his charge, and as the examination of the several periodical reports and accounts from the Executive Officers

(the Tahsildars and Engineer), as well as the preparation of the Returns, Bills, &c. due to the Central Office, will devolve on the Collector's Department, it is necessary that there should be a separate Establishment in the Huzur for this duty exclusively, inasmuch as no hands from the existing staff of Clerks or Accountants can be spared. I accordingly beg to suggest the employment in my office of the moderate Establishment shown in the margin.

	RS.
1 English Accountant	50
1 Assistant	35
1 Clerk	30
1 Tamil Gumastah	25
1 Do.	20
1 Attender	7
Total	167

* Vide accompanying list.

Thus it will be observed that the total expenditure on account of Establishments is Rupees 1,505 per month, or Rupees, 18,060* per annum, which is less than one-third of the present cost of the Public Works Department. I have not included the Neilgherry Taluk among those for which Establishments are proposed. It should, I think, be retained under a separate European Executive Officer on account of the importance of the Ghauts and roads, and the constant attention which they require.

8. In regard to the Establishment required for the conservancy of the channels and other irrigation works, and for regulating the distribution of water to the lands, I beg to refer the Board to my predecessor's letter to Mr. Pelly, dated 29th November 1861, No. 1, a copy* of which is enclosed for their information. It will appear that Mr. Thomas proposed an Establishment at an annual cost of Rupees 19,992.

* With Statement. As a set off against this sum, the existing Inam lands allotted to Neerani Sibbendy, assessed at Rupees 1,950-7-2, will be resumed, and the fees paid by the Ryots amounting to Rupees 14,853-3-10, will be included in their Puttah and recovered from them; the additional charge to Government will be Rupees 3,188-5-0. I concur in Mr. Thomas' proposition, and see no necessity of any further increase of Establishment.

9. On the third point, I beg to observe that the same method in which accounts are now kept locally, and on which accounts are rendered to the office of Audit for Public Works by the present Engineer's Department, can best be observed by my Department, till such time as the working of the system by the Revenue authorities require a change.

10. Adverting to paragraph 2 of the Board's Circular under reply, I beg to observe that except in a few places there are no large land-holders in this District, to whom the execution of public works can be safely entrusted, and therefore the system of advances will still have to be retained in some cases; but vigilance on the part of the Tahsildars, and a due supervision on that of the European or Native Collectors of the respective divisions, will prevent loss to Government, and facilitate the adjustment of the advances at an early period.

ENCLOSURE No. 1.

ABSTRACT.—Statement showing the number of works of irrigation, and the amount of revenue under each in the District of Coimbatore.

ENCLOSURE No. 2.

ABSTRACT.—List of proposed Establishment required for the execution of Public Works under the Collector of Coimbatore.

ENCLOSURE No. 3.

From E. B. THOMAS, Esq., Collector of Coimbatore, to C. Pelly, Esq., Member of the Board of Revenue, Madras, dated 29th November 1861, No. 1.

1. I have the honor to acknowledge the receipt of your Circular, No. 876, dated 17th May 1861, requesting my opinion on the Neerany Establishment.
2. I beg to enclose a Statement No. 1, prepared in the form appended to your communication, showing the different classes of tanks and channels on which Neeranies, &c. are now employed together with those on which there is no Establishment at present, but which in my opinion should be provided with Sibbendy.

3. The number of servants to be employed hereafter, with the rate and amount of salary proposed for each work of irrigation, is specified in columns 7, 8 and 9 of the Statement.

4. Statement No. 2 is forwarded descriptive of the several classes of irrigation works. The lands under them in some cases fall short of the standard extent of 65 acres, in others although they exceed that limit, still a great portion of them is either left waste or appropriated to dry cultivation on payment of Punjab assessment. The Neeranyics have little or nothing to do here; the works have hitherto been under the charge of the village authorities, and may safely continue to be so, and I do not, therefore, think that a special Establishment in this case is called for.

5. I have classified the several works of Irrigation on the principle adopted by the Collector of Bellary, but the number of servants and the rate of pay proposed to each are determined with reference to the nature and requirements of the locality.

6. The aggregate assessment of the lands allotted for the emolument of Neergunties, including the fees paid by the Ryots either in kind or money, amounts to Rupees 16,803-11-0; while the salary proposed amounts to Rupees 19,992, or 3,188-5-0 more than the present emoluments as particularized in the accompanying Abstract No. 3.

	RS.	A.	P.
Land assessment.....	1,950	7	2
Fees both in kind and cash....	14,853	3	10
	16,803	11	0

7. If the proposed payment is eventually sanctioned by Government, it is probable that the Ryots would make some difficulty in paying the fees which they have hitherto been doing without objection, in which case the additional cost to Government would amount to 18,011-8-10.

8. With a view to avoid so large an additional expenditure to the State, I would suggest that the amount of fee payable by each Ryot be added to his Pattah, and recovered by Government for payment to Neeranyics.

9. The water Establishment should always attend to the tanks and channels, close and open the sluices and calingulahs whenever required, and supply regularly all lands under them with water; also watch the bunds and report to the proper authority any breach or injury, aiding them in repairing the same.

10. The Neerany Establishment in this District do not perform any of the general duties in the village, their whole business being confined to the requirements of the tanks and channels.

(True Copy.)

(Signed) P. GRANT, Collector.

ENCLOSURE No. 4.

ABSTRACT.—Statement showing the cost of the present and proposed Establishment of Neergunties in the several classes of tanks and channels in the District of Coimbatore.

Ed. J. Tulloch.

From the Honorable D. ARBUTHNOTT, Collector of Salem, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated 18th July 1862, No. 163.

1. I have the honor to reply to the Board's Miscellaneous Circular, dated 26th May last, No. 3,410, communicating the Proceedings of the Madras Government, dated the 21st idem, and requesting all Collectors to report on the three points adverted to in the Government Order relative to the re-organization of the Department of Public Works.

2. With regard to the first point, I beg to state that after consulting the District Engineer and the several Revenue Officers in the District, I am of opinion that all the works specified in the margin should be transferred to the Revenue Department as falling under the term "Secondary."

IRRIGATION WORKS.—All Communications except the following—

1. Trunk Road No. 1, between Vanimbadi and Attipuli on the Mysore frontier.
2. Road between Tripatur (Railway station) and Mullapudi on Trunk Road No. 1.
3. Trunk Road No. 3, between Vanimbadi and Bavani, or the Cauveri, via Dharmapuri, Umalur, and Senkaridrug.
4. Road between Admanecotta and Usur, via Palcode and Royacotta.
5. Road between Dharmapuri and Marapur, (Railway Station).
6. Road between the town and the Railway station at Salem.
7. Road between Salem and Talavasal on the Cuddalore frontier.
8. Road between Salem and Valayaputti on the Trichinopoly frontier.

Buildings all Military.

3. Except the three Cauvery channels there are no irrigation works of any importance, or yielding a revenue of more than 15,000 Rupees in this District. These channels are therefore the only works which in this District may be called first class, but I do not advocate the retention of these channels by the Department Public Works. For the reasons stated in my letter, dated the 18th June last, No. 135, they should in common with all the other irrigation works be transferred to the Revenue Department.

4. The District Engineer is of opinion that all repairs of irrigation works and buildings, and all minor new works below 2,000 Rupees, should be placed under the Revenue Department, while the

rest should remain with Public Works Department. I do not see any necessity for this limit. With the exception of the principal roads above referred to, all other works, whether repairs or new, should be placed under the Revenue authorities without any restriction.

5. It was the rule under the old system for the Civil Engineer's Department to frame Estimates for all new works, but the work was invariably carried out by the Revenue Department except in the cases of Trunk roads. I would now follow the same course. All Estimates for new works above 500 Rupees, not being emergent, should as a rule receive the concurrence of the District Engineer, and Estimates for new works above 2,000 Rupees should be prepared by the Engineer's Department, but the work in all cases should be carried out by the Revenue Department except in those of great magnitude, and requiring much scientific skill.

6. With reference to the second point in the Government Order, I beg to enclose a Statement showing the strength of the Executive and Office Establishments, required by the Revenue Department to carry on public works under the new arrangement.

7. The Establishment in the Huzar, under the old system, consisted of three Gumastahs and one Writer; but the work was not confined to these hands only.

8. Besides these hands, the Naib Serishtadar, the Deputy Accountant (70 Rupees), and two other hands belonging to the Revenue Department, were exclusively employed in the management of the Maranut Department. As the Revenue Establishment, lately revised under Mr. Pelly's orders, has been so fixed that it is no more than what the increased work devolving on the Establishment actually requires, it is impossible that any aid from that Establishment could now be expected for the Maranut work. The Establishment I now propose is not, therefore, more than what was formerly employed in the work, and is not more than what is actually required for the efficient management of all details, and for the scrutiny of the Taluk accounts, and the due preparation of the accounts in the Huzar.

9. I have allowed one Gumastah for each Tahsildar for the preparation of the accounts, and for the conduct of the correspondence, but the pay of these Gumastahs varies according to the amount of work they will have to perform.

10. With regard to the Executive Establishment, I concur with the District Engineer that 11 Sub-Overseers of the 1st Class, and three Sub-Overseers of the 2nd Class would be sufficient. The 1st Class Sub-Overseer will receive 50 Rupees a month, and the 2nd 30 Rupees. I would allow travelling allowance to these Officers at a uniform rate of 1 Rupee a day, which, considering the constant travelling they would be subjected to, I do not consider too much.

11. I have also allowed a number of Peons for each Taluk, and now that this staff of servants is so much reduced in the Taluks, an addition is essentially required for the efficient management of the Department. Out of the number of Peons allowed for each Taluk, the Tahsildars will be required to detach one to each Sub-Overseer. The total cost of the Establishment proposed is Rupees 1,471 per month, or Rupees 17,652 per annum.

12. CHANNEL ESTABLISHMENT.—With regard to the Conservancy Establishments, I beg to state that no Establishments of the kind are required in this District, except for the three Cauvery channels. At present there are Neercutties in some Taluks of the District, while in others there are none. In all cases where there are no Neercutties, the Ryots themselves watch the irrigation works, and distribute the water themselves, under the superintendence of the Village Officers. I am therefore of opinion that all irrigation works except the Cauvery channels, should be left to the management of the body of Ryots under the orders of the Village Monegar.

13. The Establishments maintained for the Cauvery channels are shown in the enclosed Statement. They are partly paid in ready money, and partly in grain fees. As the collection of these grain fees are left to the village servants themselves, the growing complaint is that they are not regularly paid. The revision of these Channel Establishments is now under contemplation, and a report on the subject will be made very shortly to Mr. Pelly, when I propose to recommend that the grain fees should be commuted into ready money payment, and included in the Ryots' Pattahs.

14. With regard to the third point in the Government Order, I beg to state that the following system may be adopted in keeping the accounts, and rendering them to the higher authorities:—

First.—That the Tahsildars should, on the 25th of every month, send the Collector an Estimate showing the funds required for the next month's expenditure.

Second.—That this Estimate be returned to the Tahsildar with the Collector's endorsement sanctioning the amount.

Third.—That the Tahsildars shall draw Cheques in favor of the Sub-Overseers, or other Officers entrusted with the execution of works in his Taluk, or in favor of the Contractors, but in no case should the aggregate amount of Cheques, drawn by him in a month, exceed the amount entered in his Estimate, and sanctioned by the Collector. The Tahsildars will also take care that in no case a Sub-Overseer is at one time entrusted with a Cheque for more than 300 Rupees.

Fourth.—That every Tahsildar should keep a Register of Cheques, an extract of which, showing the Cheques issued during the previous month, shall be sent to the Collector with an additional column showing the date of payment at the beginning of every month.

Fifth.—That the Tahsildar should, on or before the 3rd of every month, submit to the Collector an Account Current, a Progress Report, and a List of works completed during the previous month, in the same forms in which the Range Officers now submit them to the District Engineer. These Returns will be supported with proper vouchers, viz., Receipts, Measurement Bills, &c.

Sixth.—That the Tahsildar should submit a final Bill for all works on their completion.

Seventh.—That the Collector shall submit to the Controller of Public Works Accounts, every month, on or before the 15th, the following Returns for the previous month, in the same forms in which they are now submitted by the District Engineer:

- (1.) Account Current.
- (2.) Progress Report.

(3.) Statement of unadjusted expenditure to accompany the Account Current.

(4.) Statement to accompany the Progress Report.

Eighth.—The Collector should also send the following Bills of expenditure on works completed, or in progress, in the same forms as they are now rendered by the District Engineer:

- (1.) Annual, for works between 50 Rupees and 2,000 Rupees.
- (2.) Half-yearly, for works under 50 Rupees, and
- (3.) Quarterly, for works above 2,000 Rupees.

15. With reference to paragraph 2 of the Board's Proceedings, I beg to state that the Village Officers are not willing in this District to undertake the execution of works though they have an interest in their efficiency. They are generally very apathetic in this respect. Besides the customary labor which we have the means of enforcing from them, petty works of irrigation to the extent of 50 Rupees may be entrusted to them whenever they are willing to undertake them.

16. In order to avoid the advance system as much as possible I would, as a general rule, give out all works on contract as is now done in the Department Public Works, and the Contractor paid once every week for the work that he has actually performed, on the Sub-Overseer inspecting the work, and submitting a Measurement Bill. There is no doubt a great deal of work will be done on contract, and in such cases it would be of great importance that punishment should follow swiftly the breach of such contract. I therefore beg to suggest that the Taluk Tahsildars should be vested by Government with powers to try cases falling under Act XIII of 1859.

17. I beg to enclose for the information of the Board, copy of a Memorandum drawn up by the District Engineer on the subject. The District Engineer also furnished me with several forms which are now in use in his Department, and which may be adopted by the Revenue Department when the Executive is transferred, these I do not, however, consider it necessary to send to the Board.

ENCLOSURE No. 1.

ABSTRACT.—Proposed Establishment for the Maramut Department.

ENCLOSURE No. 2.

ABSTRACT.—Statement showing the existing Establishments of the Cauvery Channels.

ENCLOSURE No. 3.

MEMORANDUM regarding the points noted in Extract from Minutes of Consultation, No. 1,106 of 21st May 1862, in connection with the transfer of the Executive from the Department of Public Works, to the Revenue authorities.

1. With the solitary exception of the Paramatty Rajah Vaikal in the Namakal Taluk, all the irrigation works in the Salem District may be termed "Secondary works," for the yearly revenue of any one of them does come up to Rupees 15,000.

With regard to roads, all but the following may be termed "Secondary."

- (1.) Trunk Road No. 1, between Vaniembadi and Attipilli on the Mysore frontier.
- (2.) Road between Tripatur (Railway station), and Malapadi on Trunk Road No. 1.
- (3.) Trunk Road No. 5, between Vaniembadi and Bavani on the Kaveri, via Darampuri, Omalur, and Senkaridroog.
- (4.) Road between Adamankotta and Usur, via Palakode and Rayakotta.
- (5.) Road between Darampuri and Morapur (Railway station).
- (6.) Road between the town and Railway station at Salem.
- (7.) Road between Salem and Talavassal on the Cuddalore frontier.
- (8.) Road between Salem and Valajapatty on the Trichinopoly frontier.

These roads are all Railway feeders of importance, and all but one (No. 5) connect large towns.

2. I would place under the Revenue authorities all repairs of irrigation works and buildings, and repairs of communications except on the roads above named; all minor new works also; under Rupees 2,000.

3. There is a Statement of the executive agency which appears to me sufficient, but not more than sufficient to carry on work under the orders of the Tahsildars.

(1.) Nine (9) Native Sub-Overseers of the 1st Class on 50 Rupees per mensem, with the present "Taluk" travelling allowance of Rupees 30.

(2.) Five (5) Native Sub-Overseers of the 2nd Class on Rupees 30 per mensem, with the same travelling allowance as those of the 1st Class.

These men should be thus distributed among the Taluks—

Usur.....	{ Usur Proper...	1 First Class.
Kistnagiri...	{ Denkanikotta...	1 Second do.
Tripatur...		1 First Class.
Otangiri.....		1 Do.
Darampuri...		1 Do.
Salem...	{ Salem Proper...	1 Do.
	{ Omalur.....	1 Second do.
Ahtur.....	{ Rasipur.....	1 First Class.
Trichengode....	{ Trichengode Proper...	1 Do.
	{ Senkaridroog...	1 Second Class.
Namakul.....	{ Namakul Proper...	1 Do.
	{ Paramatty...	1 First Class.
		1 Do.

4. We do not want any Conservancy Establishments, except for the three Cauvery channels in the Namakul Taluk, and the Establishments of these are now under consideration and revision in the office of the Head Assistant Collector. The Neercutties and other servants maintained for the conservancy of irrigation works, and the distribution of water in other parts of the District are utterly useless and inefficient; and the Ryots, acting under the supervision and control of heads of villages can manage very well by themselves.

5. The accounts should certainly be kept on the present system, the Tahsildars taking the place of the Range Officers, and the Collector that of the District Engineer. Some of the forms now in use may be abolished without any detriment to the efficiency of the system.

Blank forms, and a List of the accounts and returns which appear to me indispensable, are enclosed* for the Collector's inspection.

The District Engineer's Head Accountant should be transferred to the Collector's office, thereto hold the position formerly held by the Naib Serishtadar; and under him should be an Accountant, a Writer, and two Gumashtas, to be exclusively employed on accounts and correspondence connected with public works.

6. On no account whatever should the system of "Advances" be reverted to in the smallest degree. Two years and a half, during which the aggregate expenditure on Public and Local Fund works has been Rupees 4,94,957, have now passed without an Anna being advanced for any purpose.

The Tahsildars and their subordinates will, -I feel pretty sure, endeavour to save themselves trouble by representing to the Collector that without advances work cannot go on, but my experience on this point enables me to state the contrary most positively, and without any reserve.

(Signed) T. E. GAHAGAN, District Engineer of Salem.

(True Copy.)

(Signed) D. ARBUTHNOTT, Collector.

Salem, 5th June 1862.

Ed. J. Tulloch.

From A. P. HODGSON, Esq., Acting Collector of South Canara, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Mangalore, 29th July 1862, No. 69.

1. I have the honor to report on the three points specified in the Government Order dated May 21st 1862, No. 1,106, forwarded with the Board's Proceedings dated 26th idem, No. 3,410.

2. In this District there are no irrigation works of the kinds referred to. The secondary communications I deem to be all the cross roads; and these are enumerated in the accompanying Statement No. 1. It is proposed to include also Trunk Road No. 2 as it is bridged, and in very good repair.

3. The Military and Commercial lines of communication, now most incomplete from the almost total absence of bridges, and which should therefore remain under the Executive Engineer, are:—

		Miles.
1st.	From Manjerabad Ghat to Uppinangady	29
2nd.	„ Charmady Ghat to Buntwal	42
3rd.	„ Pans Mangalore by Vittal to Hoosdroog	45
4th.	„ Mangalore to Agoombe Ghat	50
5th.	„ Agoombe Ghat to Colloor Ghat	65
		231

These are distinguished on the map which accompanies this report from the roads previously alluded to, by red lines. The District Engineer is of opinion that an Executive Engineer with one Assistant, and a subordinate establishment paid from Estimates, and the existing maintenance allowance somewhat increased will suffice for the management of these roads, and that the present permanent subordinate establishment particularized in Statement No. 2 will be available for transfer to the Revenue Department.

4. In Statement No. 3 is shown the number and salaries of the Executive Agency which, I am of opinion, will be required to carry out the works to be undertaken by the Revenue authorities, and also similar particulars in regard to the Office Establishments which it will be necessary to maintain. There would be one Sub-Overseer to each Taluk, and two Overseers over them with small establishments. One Overseer would have charge of the Coondapoor, Oodipy, and Mangalore Taluks; and the other of the Mangalore Town, together with the Taluks of Oopinangady and Cassergode. The works for the present year that would be placed under their charge are numerous and important; but they are not ordinary, since the erection of two new Cutcheries, two new Police stations, and the extension of the Quay at Mangalore are comprised in the list. They are given in Statement No. 4.

5. All the accounts should be compiled in the Huzur for audit; and it would be necessary to keep a small establishment for this purpose. The Collector's bills for expenditure on new works and from discretionary funds might be subject to revision by the Executive Engineer. The Sub-Overseer's accounts should be passed by the Overseers, and forwarded by them to the Huzur. Each Sub-Overseer should send to the Overseer of the range on the 20th of each month, an estimate of his cash requirements for the ensuing month; and the Overseer should forward it to the Tahsildar to be transmitted to the Huzur with the general monthly Estimate.

6. There would be no necessity to make large advances. The payments for labor could be made weekly, and the money required for the purpose drawn weekly from the Taluk Treasury by the Sub-Overseer, on the Overseer's Estimate. The Overseer should, with the assistance of the Tahsildar and the village authorities, collect materials; and payments for the same could be made by the Tahsildar, an account being rendered once a month. The Overseers should receive their orders direct from the Huzur; but they should not act altogether independently of the Tahsildars. Each Sub Overseer however should be under the immediate control of the Tahsildar of his Taluk.

7. The above are the changes which it appears to me will be required on the transfer of certain public works of the District to the Revenue authorities, and others will doubtless become necessary under the operation of the new system.

ENCLOSURE No. 1.

ABSTRACT.—Names of roads which it is proposed to transfer to the Revenue Department in the District of South Canara.

ENCLOSURE No. 2.

ABSTRACT.—Statement of the existing Establishment proposed to be transferred.

ENCLOSURE No. 3.

ABSTRACT.—Statement of the Establishment proposed by the Collector.

ENCLOSURE No. 4.

ABSTRACT.—Statement of works proposed to be transferred to the Revenue Department with the amount of sanctions for the same.

ENCLOSURE No. 5.

ABSTRACT.—Sketch Map of South Canara.

Exd. J. Wright,

From G. A. BALLARD, Esq., Collector of Malabar, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated Calicut, 26th June 1862, No. 131.

1. I have the honor to acknowledge the Proceedings of the Board of Revenue, dated 26th May 1862, No. 3,410, communicating a despatch from the Secretary of State for India, and a Government Order thereon relative to the re-organization of the Department Public Works, and calling for report on certain points specified by Government. As I believe the opinions of the District officers rather than an exegesis of the despatch, the intention of which is somewhat doubtful in parts, is desired, I shall freely state those I have arrived at, premising that I have conferred with the District Engineer and several officers of experience, and that my remarks have their general concurrence.

2. Two main objects, as it appears to me, should be kept prominently in view in re-organizing our Department Public Works. One is to relieve the Professional Department of all work that can be done as well, if not better, by other agency; thus leaving the Engineers free to bring their scientific acquirements to bear in devising new schemes, and in personally visiting, and inspecting or superintending, more or less closely as the case may require, all works in progress, which owing to the attention these officers have to pay to their Account Department, &c., it is impossible for them to do efficiently at present; and the other, to utilize to the utmost the legitimate influence of the Revenue authorities which is naturally great, in enlisting the interest, and securing the co-operation of the people in executing new, and repairing and preserving existing works. I believe these objects can best be obtained by throwing all ordinary execution, and the care of the accounts, on the Revenue Department, leaving the general projection, and careful inspection of all works, with the execution of some of an exceptional character only, with the Engineers. I shall now express myself more in detail, and with more particular reference to this District.

3. EXTENT AND DESCRIPTION OF WORKS TO BE PLACED UNDER THE REVENUE OFFICERS.—In Malabar the only works connected with Irrigation are a few artificial dams excluding the sea water from certain backwaters, when the level of the fresh water in the latter falls low on the cessation of the rains.

1. Irrigation.
2. Communication.

Average annual expenditure of 7 years from 1855-56 to 1861-62 inclusive.	
	rs.
From General Funds.....	4,068
From Local Funds.....	0
Total.....	4,068

6. IRRIGATION.—The crops raised depend upon the falling rains which generally supply their wants abundantly. Thus there are no existing irrigation works of importance; what secondary works there are can be, and should be, under the Revenue authorities.

4. There may be capabilities for Irrigation works on an extensive scale by the formation of reservoirs in the great natural basins, which receive, but unassisted do not retain, the hill drainage, that may at some future period deserve attention, but these do not affect the question now.

Average annual expenditure of 7 years from 1855-56 to 1861-62.	
	rs.
From General Funds.....	3,126
From Local Funds.....	3,448
Total.....	6,574

5. COMMUNICATIONS.—WATER.—To proceed to communications. Firstly water communications. There are the Cannanore and Kaval canal, the canals and backwaters leading from Vada-geri to Beipur, the canal from Tanur to Ponani, and the canals and backwaters from Ponani to Cochin, but the expenditure on these has been small of late; what has been was principally defrayed from the Ferry Funds.

6. Work connected with the conservancy of these should be executed by the Revenue Department. In the case of new cuts being opened, or ordinary new works undertaken, all the earth, and ordinary masonry, work should be done by them also.

7. If a bridge or a lock of peculiar construction is to be undertaken, and direct and accurate scientific superintendence is required, the work becomes an exceptional one, and should rest with the Professional Department.

8. Here, as above remarked with regard to Irrigation, it is possible that it may in future be thought advisable to improve river communication by processes requiring scientific superintendence. Such works the Engineers should certainly undertake, but it is neither possible nor desirable to lay down too precise rules for cases which are extraordinary, and can best be met with as they arise.

Average annual expenditure of 7 years from 1855-56 to 1861-62.

From General Funds.....	RS. 30,250
From Local Funds.....	27,280
Total.....	1,07,530

10. I would not fix any arbitrary money scale to decide what works are to be executed by the one Department, and what by the other, because a work of moderate actual cost might require more professional superintendence than a more expensive, but simpler undertaking. The general principles ruling the executive agency to be employed being laid down, when a canal or line of road or other work is contemplated, its peculiar features if it possesses any, should be taken into consideration, and any works that it appeared advisable to entrust for special reasons to the Professional Department should be specified. If none such presented themselves, the Revenue authorities should undertake it throughout.

11. In works where both Departments were partially employed, it would be necessary to guard against clashing; but with ordinary management and proper feeling between the officers, I do not see that there need be any fear of confusion.

12. I think that the construction of ghats should fall under the exceptional works to be executed by the Engineers; firstly, because they require much professional superintendence; and secondly, because they are often in situations where the Revenue authorities cannot (compatibly with their other duties) give as much attention and assistance as in the case of ordinary communications lying in the heart of their work.

Average annual expenditure of 7 years from 1855-56 to 1861-62, inclusive.

From General Funds.....	RS. 30,227
From Local Funds.....	40
Total.....	30,267

13. BUILDINGS.—I would have the construction and repair of ordinary revenue, and general service buildings executed by the Collector.

Such buildings as Court houses, Jails, large Hospitals, &c. are generally required in towns where labour is procurable at rates pretty well defined, and where the peculiar influence of the Revenue authorities is less marked than in country villages. These I would have undertaken by the Engineers, and repairs and new works in all Military buildings should certainly be executed by them.

14. It may be well before going further to take a glance at the former system prevailing in the Department Public Works in this district, both as regards the Executive and Account Department, and to consider what accounts should hereafter be kept; we shall then be in a position to judge what Establishment is likely to be required.

Collector's Division.	
1 Maramut Maistri.....	RS. 50
1 Native Accountant.....	35
1 Assistant do.....	12
2 Do. at 8 Rupees each.....	16
1 Do.....	7
Sub-Collector's Division.	
1 Maramut Maistri.....	50
Total.....	170

15. FORMER SYSTEM.—The old Maramut Establishment in this District was, as noted, aided by the general Revenue Establishment. When further executive superintendence was required, temporary Maistris were employed, and these generally unsatisfactory agents were had recourse to constantly, their cost being defrayed by charges in the estimates and accounts under the head of "Superintendence."

9. COMMUNICATIONS.—LAND.—With regard to land communications, the same principles should be followed. Earthwork, metalling, and ordinary masonry on all roads, whether Trunk or District, new or old, should be performed through the Revenue authorities. The construction of extraordinary bridges, or other works alone being conducted by the Engineers.

16. New works, as well as repairs, were as a general rule proposed by the Revenue Officers. Estimates and plans were prepared with the aid of Maramut Maistris, and forwarded to the Civil Engineer for correction, and submission to the Chief Engineer for sanction. Estimates and plans for large and important works were prepared and submitted by the Civil Engineer, both direct and through the Collector for sanction. Special works, as lines of Trunk Road, extraordinary masonry works, &c., were carried out entirely by the Executive Officers of the Engineer's Department; all others were executed by the Tahsildars with the aid of permanent and temporary Maistris. Monthly Progress Reports, in a very simple form, were submitted by the Civil Engineer to the Collector, and to the Chief Engineer. The monies disbursed from time to time on the application of the executive officers, and Tahsildars were, in the first instance, debited in the Collector's monthly account to "Advances." Bills of actual expenditure were not furnished by these officers to the Collector until the completion of each work. At the end of every Calendar year an Abstract, supported by translates of such Bills for works completed during the year, was prepared by the Collector, and forwarded in the course of the following year through the Civil Engineer for sanction to the Chief Engineer. On receipt of the said sanction, the sums which up to that period stood debited to "Advances," had to be adjusted in the Collector's accounts to specific heads. All advances, until thus adjusted, stood as a retrenchment against the Collector in his accounts with the Civil Auditor.

17. The accounts of expenditure submitted for the five years prior to May 1856, were as follow:—

For 1850, Abstract supported by 33 Bills for.	Rupees 32,673, Desptl. 22nd Decr. 1851.
„ 1851, Do. by 23 do.	„ 14,272, do. 26th June 1852.
„ 1852, Do. by 30 do.	„ 18,968, do. 6th July 1853.
„ 1853, Do. by 44 do.	„ 52,490, do. 5th Oct. 1854.
„ 1854, Do. by 39 do.	„ 33,920, do. 28th Nov. 1855.

The actual expenditure in these years was much larger.

18. In addition to the annual accounts of expenditure above alluded to, the following Periodical Returns were furnished by the Collector to the Chief Engineer prior to the year 1856:—

- Quarterly Statement of Contingent charges on petty works.
- Quarterly Reports showing the progress of important Public Works.
- Half-yearly Statement of emergent works executed.

19. Now the length of time the advances remained unadjusted, under the system just sketched, was objectionable in the extreme, and altogether there was a want of method and exactness in the Account Department. Accordingly a set of rules for the keeping of accounts was issued in September 1856.* I understand that much more complicated forms have been introduced since, but in my humble opinion those just alluded to are simple and effective, and I would propose their general adoption. Some relaxation may have to be allowed in the dates by which the Periodical Returns are required to be submitted to ensure practical punctuality, but this and several minor points of detail can be settled hereafter.

20. FORMS OF ACCOUNTS PROPOSED.—The principal forms to be kept or furnished by the Revenue Officers would be as follow:—

By Tahsildars.		Vide Rules for drawing funds, and keeping accounts in the D. P. W. E. M. C., dated 30th September 1856, No. 1,776.	
1. Register of new works sanctioned and ordered to be executed.....	Form	L.	
2. Do. of repairs do. do.	„	L.	
3. A Cash Book... ..	„	V.	
4. Abstracts of do. to show expenditure on each work... ..	„	W.	

5. Bills of expenditure accompanied by abstracts from Cash Books and Station Books... Form Q to W and X.

6. Progress Report... M.

7. Account Current, with abstract to show the Bills submitted, and account of expenditure remaining unaccounted for... E.

By Collectors.

1. Register of Estimates for new works... K.

2. Do. do. for repairs... K.

3. Bills for works completed or at certain stages of progress... X.

4. Bills of petty repairs... I.

5. Progress Report... N.

6. Account Current... G.

7. Abstract of Bills submitted, and expenditure remaining unaccounted for... H.

21. Of the accounts to be kept by the Tahsildars, Nos. 1 to 4 inclusive, should be inspected occasionally, or periodically as may be deemed necessary. No. 5 would be submitted on the completion of a work, or in works in progress, at the close of the official year; and in large works on the completion of expenditure of Rupees 25,000, whatever stage may have been reached. Cash Books and Station Books, &c., would be kept in duplicate, or balanced monthly, and sent up to the Collector's office for inspection and return; the entries would be kept in monthly sections, so that no inconvenience or check would arise in keeping the accounts regularly. Nos. 6 and 7 would be submitted monthly. The District Engineer, and his Assistants should be at liberty to examine any of these accounts at the Taluk stations, or at the scene of operations.

22. Similarly in the accounts to be kept by Collectors, the Registers would be kept for abstract periodical report. Bills (No. 3) as proposed in the last paragraph, but without the Cash and Station Books. Bills of petty repairs would be submitted half-yearly, and accounts Nos. 5, 6 and 7, monthly.

23. But if the Collector and his Department are to undertake executive duties, and to render accounts, as proposed above, an adequate Establishment must be provided. It was owing to the utter insufficiency of the agency allowed for the performance of the duties devolving on it, that led to the idea that the Revenue Department was not efficient for execution and account, and the change to the present system.

24. Sir Charles Wood's despatch provides one District Engineer for each District, and as many Assistants as may be considered required. It is not my province to say how many are wanted here; but I would respectfully but urgently deprecate an undue diminution in their numbers. Freed from office work almost entirely, their duties would be constant and minute inspection of

1 English Clerk.....	Rs. 40	works in course of execution by the Revenue authorities, or
1 Assistant do.....	30	the execution of such exceptional works as are appointed to
1 Native Accountant.....	35	be executed entirely by the Professional Department.
1 Assistant do.....	20	
Sub-Collector's Accountant.....	20	
Head Assistant Collector.....		
Deputy Collector.....	at 15 45	
Do. do.....		
4 Overseers at 25.....	100	
4 Do. at 35.....	140	
2 Do. at 50.....	100	
6 Taluk Accountants at 15.....	90	

25. The Collector's Establishment should be something as noted. This would provide a fair Office Establishment, and one Maistri for each Taluk. It must be remembered that the old Establishment was utterly insufficient, that the Taluk Establishments have been reduced, and the size of the Taluks increased; and that the expenditure on public works is now, and it is hoped will continue, much greater than it was in former days.

26. The Office Establishment would be amply employed in checking the estimates, and accounts; examining the bills submitted; preparing the returns; and carrying on the general correspondence connected with an annual expenditure of about a lac and a half of Rupees.

Total..... 1,53,932

General Funds..... 1,25,379

Local Funds..... 33,603

Total..... 1,53,932

27. I have named ten Maistris or Overseers, for I think that number will be required, though I would not propose their being invariably fixed to any one Taluk. As a general rule, it would be desirable to have one man in charge of the execution and conservancy of the public works in a Taluk; but it might often be necessary to send a second Overseer to superintend a part of a large Taluk; and to place two Taluks as a more or less permanent arrangement under one Overseer. If properly regulated these changes, so far from causing any confusion, would be a valuable check both against idleness, inattention, and systematic fraud. The Maistri would be subordinate to the Tahsil-dar of course. He would assist in framing estimates, and keeping the accounts, and would be perpetually watching the conservancy of works in his range, as well as superintending the execution of such new works as might be under execution. As above hinted, when necessary a Maistri might be detached in special employ. The Taluk Accountants would be employed in any Taluks in which the works were heaviest. With the reduced Taluk Establishments some provision of this sort is absolutely necessary. It will be seen that the total cost of proposed Establishment comes to Rupees 620 per mensem, that of the Engineer's Establishment at present is Rupees 1,832.

28. I must say a word about the preparation of Estimates. Those for ordinary repairs and new works up to Rupees 500, might be prepared by the Revenue Department, but as a rule Estimates exceeding that amount should be prepared by the Engineers. The old division of ordinary, extraordinary, and emergent, was a good working one. A list of all ordinary (and as far as possible extraordinary) Estimates falling to their province, involving an expenditure of about Rupees 25, should be prepared by the Tahsildar and Maistri, and given in to the Collector by a fixed date, and should be communicated to the District Engineer for responsible counter-signature or remark. With the District Engineer's approval, all Estimates up to Rupees 2,500 should be passable without further reference. The Tahsildars should have authority to carry out petty repairs or works, not involving an expenditure of more than Rupees 25, without previous reference whenever it seems to them desirable to do so.

29. As a general principle, I would encourage the landed proprietors, the Adigaris, and substantial inhabitants generally, to take contracts for the execution of new, and the conservancy of existing, works to the utmost possible extent; and in this District, I believe very much may be done in this way.

30. There are many other points of detail on which I could touch, but I must not prolong this letter. The importance of the subject will, I trust, be my apology for the length it has already reached.

P. S.—I submitted the draft of this letter to the District Engineer, with a request that he would favor me with any remarks, especially as to whether any of the accounts and returns (paragraph 20) could be dispensed with, or whether any others were indispensably necessary; and whether he thought suitable Overseers could be got for the pay proposed, and the general strength of Establishment, sufficient for the work. I append his reply in original, with a marginal note or two of my own thereupon.

Dated 24th June 1862, No. 62.

ENCLOSURE No. 1.

From Captain J. BEAN, District Engineer of Malabar, to G. A. BALLARD, Esq., Collector of Malabar, dated Calicut, 24th June 1862, No. 62.

1. In reply to the questions put to me on your Draft Report to the Board of Revenue regarding the re-organization of the Department of Public Works, consequent on the transfer of the executive charge of works to the Revenue Department, and contemplated in Government Order, No. 1,106, dated 21st instant, I have the honor to state as follows.

2. The form of accounts rendered by my Department to the Central Office are more numerous than those shown in paragraph 20 of your Report, but any simplification of the system will be very advantageous. In your list of Returns to be kept by Tahsildars, Station Books are not entered, but these are indispensable as the Bills have to be made out from them. I think in the case of contracts being given for material, it will be necessary to keep Accounts Current with the contractors, as was contemplated when the new rules were first promulgated. Advances of all kinds, also, should be entered separately, and kept distinct from bona fide expenditure. I do not think it will be necessary for Collectors to submit Registers of new works, and repairs, but they should be kept for information in your own offices. The present form of Bills on large works are very complex, and can scarcely be kept to, with the agency which will be placed at your disposal. As regards the last clause of paragraph 21, I beg to point out that if Executive Engineers are to check the measurements of work done with the expenditure, the accounts must be presented to them at the work spot, and not at the Taluk stations.

They are intended to be kept—Vide No. 5, paragraph 20 of my letter.
(Sd.) G. A. B., Collector.
Such accounts would be kept under—No. 5, paragraph 20 just quoted.
(Sd.) G. A. B., Collector.

Bills should be prepared much as the example in form X in the rules—Extract Minutes of Consultation, 30th September 1856, No. 1,766.
(Sd.) G. A. B., Collector.

3. Overseers can be had at the rates mentioned by you, but I think that they should receive 30 Rupees additional, as travelling allowance when in charge of a Taluk.

I have entered an Assistant English Writer in my list since Captain Bean saw it. A Writer on Rupees 30 paid from the Ferry Funds is now entertained, and must be retained. The Native Accountant would be chosen with reference to his talent for accounts, and without reference to his English knowledge.
(Sd.) G. A. B., Collector.

4. I think the strength of Establishment shown by you in paragraph 25, is the lowest that can be taken. The Native Accountant should also know English, as the Collector will probably have much correspondence with the District Engineer. If the Sub-Collector and Assistants have to prepare the Bills, as is the case now with the Assistant District Engineers, a larger Establishment must be allotted to them.

5. I think that the Tahsildars and Maistries might be allowed to make Estimates up to Rupees 500 for new works, and Rupees 1,000 for repairs (the latter sum referring only to roads), subject to the approval of the Executive and District Engineers, who would counter-sign them in token of the same. As a general rule, if an Officer is appointed to a range with an Establishment of his own, I do not think it will be necessary for the Revenue Department to make Estimates, excepting for emergent work up to 25 Rupees, as suggested in the last part of paragraph 28.

I would have the Revenue Department make Estimates to the limit of Rupees 500, whenever it appeared to them desirable, and allow them to execute petty works under Rupees 25 with a very liberal interpretation of "Emergent."
(Sd.) G. A. B., Collector.

6. There is one point referred to in the Government Order quoted above, and not noticed by you, that is, the Conservancy Establishments necessary to watch the irrigation works. I send a Statement showing the usual Neeranikum Establishment entertained yearly, since I took charge of the District.

7. I have only touched briefly on a few points adverted to by you at the foot of your Report, as delay is of consequence. Your remarks have generally my concurrence.

ENCLOSURE No. 2.

Statement showing the Neeranikum Establishment in the District of Malabar.

Particulars.		Amount.		
<i>Yennamakul Dam.</i>		RS.	A.	P.
1 Peon at	Rupees 4 per month, for 12 months	48	0	0
<i>Veatil Dam.</i>				
3 Coolies at	Rs. 3 each per month, for 6 months... ..	54	0	0
<i>Pookaith Sluice.</i>				
1 Watchman	at Rs. 3 per month, for 6 months	18	0	0
<i>Ponany Sluice.</i>				
1 Watchman	at Rs. 3 per month, for 6 months	18	0	0
Total...		138	0	0

CALICUT, 24th June 1862.

(Signed) J. BEAN, Captain, District Engineer, Malabar.

Exd. J. Tulloch.

Copy in a Letter to Enclome
9/17th July N^o 52 of 1863

Enclosure in a letter from the
Secretary to the Board of Revenue
to the Secretary to Govt. D. P. W.
dated 10th October 1862. N^o

W. 30/12

Correspondence relative to
the re-transfer to the Revenue
Dept. of a portion of the
Muzamut work of the
Presidency.

Revenue Board Office
Madras
11th October 1862

From
W. Hudleston Esq.
Secretary to the Board of Revenue
To
Colonel W. J. Birdwood
Secretary to Government
Department Public Works.

Sir,
With reference to the Government
Order dated 21st May 1862 N^o 1106 Public Works
Department. Public. I am directed by the
Board, to submit for the information of
Government, the papers noted in the margin,
and to report their opinion on the arrangements
necessary and proper to give effect to the
instructions of the Home Government, relative
to the retransfer to the Revenue Department
of a portion of the Muzamut work of the
Presidency.

The Board deem it very necessary
to bring prominently to notice in the first
place, the very considerable changes that
have taken place in the circumstances
of the Districts since the Revenue authorities
were

*
T. Ganjam d/18 June 1862 N^o 1142
" Vizagapatnam 2 July 1862 N^o 571
" Godavery " 7 Aug 1862 N^o 130
" Krishna " 26 July 1862 N^o 169
" Nellore " 30 " " N^o 191
" Cuddapah " 5 June " N^o 178
" Bellary " 2 Aug 1862 N^o 124
" Kurnool " 17 July " N^o 172
" Madras " 7 " " N^o 233
" N. Coast " 23 " " N^o 147
" S. Coast " 2 Aug " N^o 150
" Tanjore " 18 July " N^o 266
" Trichinopoly " 14 " " N^o 127
" Madras " 23 " " N^o 143
" Coimbatore " 18 " " N^o 293
" Palam " 18 " " N^o 148
" S. Canara " 29 " " N^o 169
" Malabar " 26 June " N^o 131

were formerly relieved of this charge; and even since those Minutes by the Members of Government, on which the Secretary of State has in great measure acted were recorded.

The charges of Tahsildars have been very largely increased by the amalgamation of Taluks. The Muzur and Taluk Revenue Establishments have been reduced to the minimum of strength at all comparable with efficiency. The duties of all Magisterial Officers, including Collectors and Tahsildars, have been rendered immensely more onerous by the passing of the Penal and Criminal Procedure Codes.

The Revenue Code now before the Legislative Council will add still more to the duties of Tahsildars in their judicial capacity.

On the other hand, works of Irrigation and Communication have been considerably developed in the last few years. So that the charge to be retransferred is a more extended one than that of which the Revenue Department was formerly relieved.

While recognising these difficulties in the way of the proposed change, the Board

Board have carefully considered the best mode of giving it effect.

They consider that, except when skilled labor and Superintendence are necessary, the execution of what has been designed and estimated for by the Engineers' Department, should be entrusted to the Revenue Department. They would therefore propose.

1st that the maintenance of all existing works of irrigation and local communication be transferred to the Revenue Department. Except as regards the repair or renewal of masonry works, estimated to cost more than Rupees 1000.

2nd that the execution of all new earth works for purposes of irrigation or communication be entrusted to the same Department. together with the execution of new masonry works connected with them and estimated to cost not more than Rupees 1000.

3rd that repairs to Revenue buildings within the same limit be similarly entrusted.

The Board presume that all Estimates

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The Board presume that all Estimates

Estimates for works of importance or magnitude, will be prepared in the Engineer's Department, and that all work executed by the Revenue Department, will be supervised and tested by the Department Public Works and they infer from para 8 of the Despatch of the Secretary of State that a certain number of skilled agents will be placed at the collectors disposal.

Assuming these preliminaries the Board would sketch out the following scheme of operations.

It should be a ruling principle, from which no deviation should be permitted on any pretence, that no advances whatever shall be made for work, and that recourse shall be had to the Contract System to the widest possible extent.

The Board are fully convinced of the feasibility of the first proposal, from the fact, that within the last $2\frac{1}{2}$ years in the Salem District nearly five lacs of Rupees have been expended on Public and Local Fund works, without an Anna of advance for any purpose whatever, and it is moreover notorious that the Railway works have been carried out on the same system. Unless this principle be insisted on, and maintained in practice, the more prominent evils which attended the early system, and which led to its abandonment in favor of that which it is now proposed to modify, will infallibly be revived in greater force than ever.

As to the second proposal, the Board rely greatly on the combined agency of

of the Villagers who are interested in any work, and who in fact command when they do not themselves compose the local available supply of labor, for its speedy and economical execution. They fully believe that in a very short time, when the Villagers learn to appreciate the advantages of the joint contract system in combination with a method of payment which shall secure them from extortion, although the nominal rates for work may appear somewhat higher than what formerly ruled, the real cost to the State will be less, from the saving effected in the item of Irrecoverable advances.

Payment must be made frequently, and other parties will be thereby induced to take up contracts for work.

The Board would propose weekly payments for work performed and measured. The payment to be by means of a cheque either on the Saluk Treasury, or the Village Officer collecting the revenue, in favor of the Contractor, or of the Saluk Sub Overseer when the work is performed by day laborers, or in the more extensive works to be made by the Assistant Engineer working under the Collector, and if found practicable by means of the Ticket system.

The Establishments which the Board

Board would propose are as follows.
 For Districts such as Canara and Malabar
 where there are no artificial irrigation works
 or as Ganyam and Vizagapatam where Semina-
 daries form a large portion of the area con-
 cerned smaller establishments will suffice.

Collector's Cutcherry.

1 Head Clerk and Accountant.	Rs. 70
1 Accountant	35
1 " "	20
1 Vernacular Clerk	35
1 " "	15
2 Attenders at Purses	14
1 Maramut Overseer. Purses 70.	
Travelling allowance for.	30.
	100
1 Lacar for " "	7
<u>9</u>	<u>246</u>

Sub Collector's Cutcherry.

1 Clerk and Accountant	20
1 Gumastah	15
1 Attender	7
<u>3</u>	<u>42</u>

Head Assistant's Cutcherry.

1 Clerk	20. 20
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Deputy Collector's Cutcherry.

1 Clerk	20. 20.
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378.

Taluk Establishment.

1st Class Taluk.

1 1 st Class Sub Overseer	Rs. 50
Travelling Allowance	30
	80
1 Gumastah attached to him	10
1 2 nd Class Sub Overseer	30
Travelling Allowance	30
	60
1 Gumastah	10

In Tahsildar's Cutcherry.

1 Clerk	20
1 " "	15
6 Lacars to be employed in the Taluk at Purses 6	30
	<u>231.</u>

2nd Class Taluk.

1 1 st Class Sub Overseer as above	Rs. 80
1 (As) Gumastah	10
In Tahsildar's Cutcherry.	
1 Clerk	20
1 " "	15
4 Lacars at 6	24
	<u>149</u>

The Board contemplate that
 every Officer in distinct revenue charge of a
 portion of a district will as a matter of course
 have the Maramut charge also. so that the
 returns &c from the Taluks will reach the
 Collector through him, and he will have
 the immediate control and responsibility
 of

of the charge.

The Collector would primarily look to him to see that nothing is left undone that is needed. His local acquaintance with the requirements of his charge, and his influence with the Villagers should render his co-operation most effective and valuable.

The following scheme for the conduct of operations on the change of system has been sketched by Captain Gahagan, the District Engineer of Salem who has been most successful in abolishing the mil of advances in actual operations. It appears to the Board well adapted for the purpose, and they would advocate its adoption.

Each Sub Overseer in charge of a Taluk or portion of a Taluk will on 20th of each month send the Tahsildar a Memorandum of the amount required to cover the expenditure of the coming month from which the Tahsildar will prepare an estimate for the whole Taluk and forward it by the 25th of the month to the Collector who will return it with his endorsement sanctioning the amount. Disbursements out of the sanctioned amount will be made by the Tahsildar by means of cheques on the Taluk Treasury of which he will keep a Register.

The Sub Overseers will obtain funds once in every seven days from the Tahsildar by means of cheques issued by the latter in the Sub Overseers favor.

On

on no account should any Taluk suboverseer be entrusted at one time with cheques to the amount of more than Rspees 300.

Payments for work done on contract and exceeding Rspees 50 in cost shall be made invariably by cheques made directly payable to the contractor concerned, and in no case shall the Tahsildar issue a cheque of this kind, until a bill giving measurement in detail and quantities for the full amount of work for which payment is claimed has been submitted to him by the Taluk suboverseer under his own signature or counter signature. Should any entry in a bill appear to the Tahsildar of a questionable nature, he shall lose no time in taking the opinion of the nearest Officer or Subordinate of the Department of Public Works, who shall if necessary test the accuracy of the bill by proceeding to the work and measuring it. When the Tahsildar is satisfied with a bill he shall issue a cheque in favour of the contractor concerned to the Taluk Sub Overseer, returning at the same time with his initials affixed the original bill.

Every Suboverseer in charge of a Taluk or portion of a Taluk will keep two cash books, one for public and the other for local fund expenditure.

The Tahsildar shall inspect the cash books and cash chests of the Taluk overseers at least once in each month, either personally or by deputation the Taluk Sheristadar or a Sub

the D. P. W. with that Officer's remarks as to the quality and cost of the work.

A monthly Memo of inspections in the accompanying form would perhaps be the most convenient arrangement.

On or before the 15th of each Month the Collector shall send to the Controller of P. W. Ac-
counts at Madras the following Returns for the previous month.

- 1 Account Current
- 2 Progress Report
- 3 Statement of unadjusted expenditure to accompany the Account Current.
- 4 Statement to accompany the Progress Report.

The Collector shall also at the same time send a duplicate of his Progress Report to the Superintending Engineer of the Circle.

The forms of bill (on completion or at the end of the year for works between 50 Rupees and 2000 Rupees, half yearly for works under 50 Rupees, and quarterly for works above 2000 Rupees) at present used by the D. P. W. shall be adhered to by the Collector.

The final bill for every work above 100 Rupees shall contain a completion report and a certificate in the prescribed form from some Officer in the D. P. W.

The Board trust that it will not be found necessary to require any accounts in

in addition to those above indicated. It is under the burden of the account system that the present Dep^t Pub Works has failed to give entire satisfaction.

Should Government be disposed to try the altered system in only a few Districts at first, the Board would suggest that Tanjore, Srirangam, and Arcot be selected for this purpose.

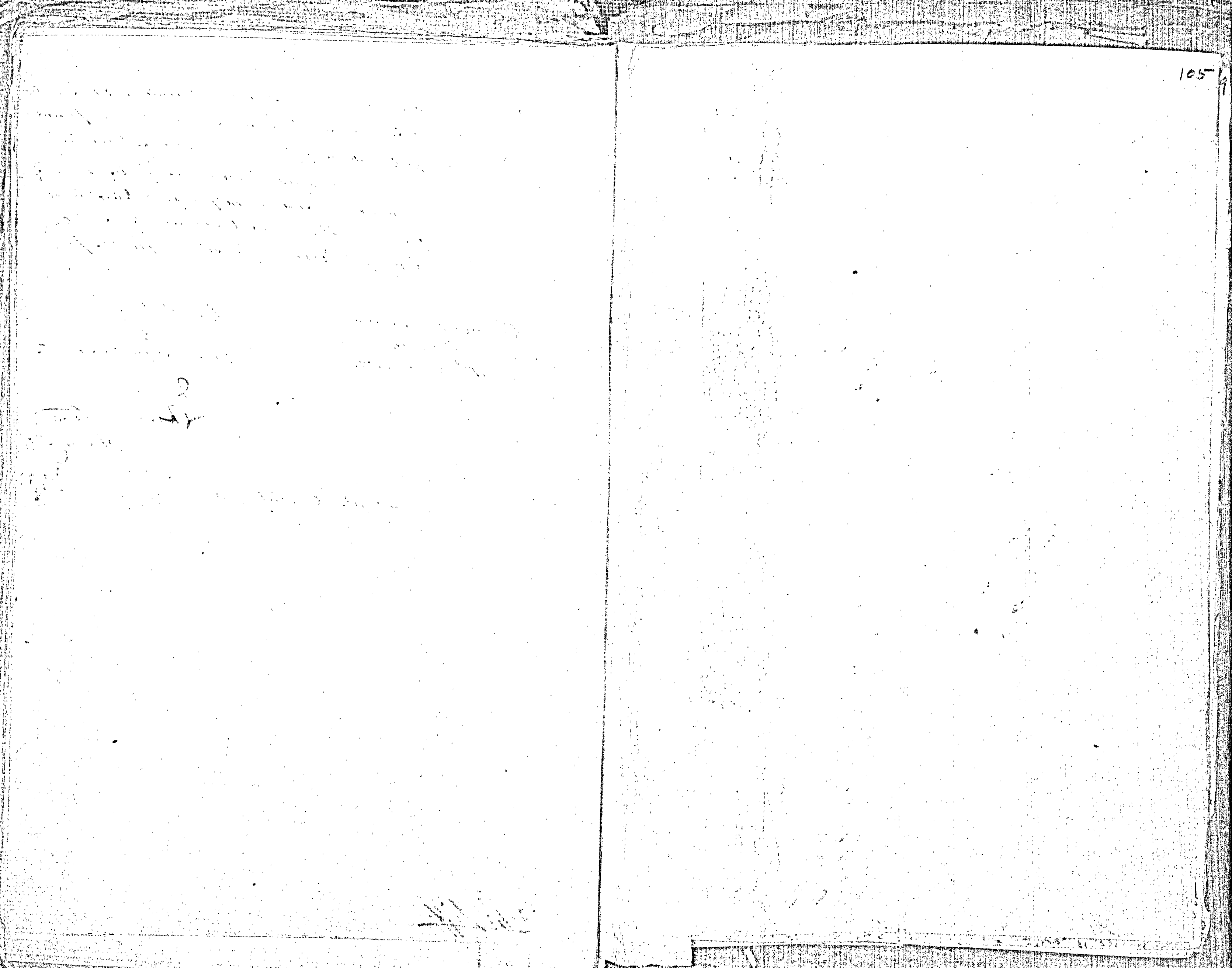
Revenue Board Office
Madras,
11th October 1862.

I have the honor to be
Sir,
Your most obedient servant.

[Signature]
Secretary.

To
Colonel W. F. Birdwood
Secretary to Government
Department Public Works.

[Signature]



225 Oct 27

1885

Information is furnished for the purpose of the order - the

18

the cost of the work is estimated by a person who is familiar with the work and the cost of the materials and the cost of the labor.

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List of Inspectors made by Captain during the month of 1885

Name of work and Amount of Estimate

Date of Completion

Remarks

Station Date

10th May 28th May

10th May 28th May

10th May 28th May

10th May 28th May

Work measured and quantities given in Salary Bills

Work completed. measurements correct and in accordance with the sanctioned Estimate. A Completion Report and certificate will be sent in the course of a few days.

Work measured and quantities given in Salary Bills

Work completed. measurements correct and in accordance with the sanctioned Estimate. A Completion Report and certificate will be sent in the course of a few days.

Signed A. B. District Engineer

107

Lab: Marks Sept 11
 22648
 a de as Government
 Under date the

(Read the following letter
 from the Secretary to the Board
 of Revenue.)

F. E. 11th October 1862

Pro: of the
 20th
 20th

submitting papers with the
 Board's opinion on the arrange-
 ments necessary to give effect
 to the instructions of the Govt.
 relative to the return of
 the Revenue Department of a portion
 of the Mammoth work of the
 Presidency

Communicated to the
 Chief Engineer, who is requested
 to convene a Committee, com-
 posed of himself, the Deputy
 Chief Engineer, Northern,
 Southern and Principal Bridges,
 and any of the other Engineer
 Officers at the Presidency
 with a view of reporting upon
 the following points.

1) On the recommendation
 contained in the Board's
 letter recorded above

Copy in a letter to England
 of 14th July 1862

A

Enclosure in a letter
 from the Secretary to the
 Board of Revenue to the
 Chief Secy to Govt. dated
 11th October 1862

11th Oct 1862

Sum of monthly sums:
 of six months

to suffer by ^{personal} ~~their~~ arrangements -

(7) The No and nature
of the Returns and accounts
sent in by the District Judges
which can be dispensed
with or simplified.

(8) The changes to be introduced in the working of the Audit Department with reference to para 14 of the Despatch from the Secretary of State communicated in the Pro: of Govt. N^o 1106 dated 21st May 1862.

The Report should
be prepared and
submitted to Govt.
with all practical
expedition.

Shepard }
4th Nov 1862 }

7 Copies.
 1. To the Chief Supr. High^d 200
 2. To the B. B. Supr. 200
 3. " " " " 200
 3. " " " " 200

Copy in a letter to Congress
3/17: July 1: 52 of 1863.

W. W. 1862 Depart
Proc. of Govt for Roads

1862-46
Proc. of the Atty Genl
for the Bridges &c

294-69
1862-69

W. W. 1862
Proc. of Govt for Roads

Transmitting to the Chief
Engineer letter from the Secretary to the
Board of Engineers reporting the arrange-
ments necessary with regard to the
transfer to the Revenue Department
of a portion of the Marine work of
the Presidency and requesting him
to cause a Committee composed
of himself the Dyling Engineers of
the three circles and any of the
Engineers officers at the Presidency
to report on the points detailed
in the order.

1862-69