

- (1) பக்கங்களின் எண்ணிக்கை 24
 (2) புதுக்கித் திருப்பிய நாள் July 89
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 6/9

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

(22)

PWD துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	1385	அச்சகம் பலவகை
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மடிக்கவோ கண்டபடி கையாளவோ கூடாது

12 sheets
22/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

Office Note from the Examiner, Public Works Accounts, dated Madras, 11th May 1888, No. 1472.

With reference to para. 4 of my note and para. 10 of the inspecting officer's notes of inspection of the Godáviri Eastern Division, printed with G.O. No. 1063 W., dated 16th April 1887, I addressed the Superintending Engineer on the subject of the stock accounts of the above division, and in doing so, I expressed my views as to the measures required in order to place the quarry accounts on a proper footing, and asked that officer to let me know how far he was able to concur in my views so as to enable me to take the orders of Government on the points, if any, as to which we might be unable to agree, and also on those points as to which we might agree in desiring a reconsideration of orders already passed.

2. I now submit the marginally-noted correspondence for the orders of Government, and I submit it through you and not through the Joint Secretary to Government, Public Works Department, Irrigation Branch, because, though the accounts which happen to be under consideration are classed as irrigation, the principles of the proposals made are of general application, and it seems desirable

that, in dealing with manufacture and other suspense accounts, a uniform system and the same principles should be followed whether the balance of the account is chargeable to Irrigation or to Provincial. The following is a summary of the case with my final remarks.

3. *Proposals for procedure in future.*—The Superintending Engineer agrees with me that the full cost of manufacture, including all current charges, should be charged to stock; but instead of relieving land and kilns by fixed instalments as required by Code para. 1789, he suggests half yearly adjustments at 5 per cent. of the outstanding value of "land and kilns" and plant. I cannot agree with the Superintending Engineer on this point, as his suggestion is not only opposed to the Code rule quoted above (with which my proposal is in accord), but, as far as I can see, there would be no advantage in it and it would save no trouble. It would necessitate redetermining the amount of adjustment every time and so introduce causes of difference of opinion and consequent delay when the amount of the balance was in dispute as is often the case. Moreover, the balance would, under such a system, be almost certain to increase steadily and continuously, because the amount of the periodical adjustment in respect of each item, being at a fixed percentage of the balance, must be less and less every time.

4. The Superintending Engineer agrees that no charges whatever should be allowed under the suspense head "land and kilns" without the sanction of competent authority (to be defined)—see paras. 7 and 13 of my letter.

5. The Superintending Engineer, in para. 5 of his letter, agrees that all repairs to items under land and kilns should be treated as current charges of the manufacture

account as also all expenditure on works of renewal, improvements under arbitrary money limit which he suggests should be Rs. 500, and when the estimated charge exceeds Rs. 500 he would require the sanction of Government in all cases. I see no objection to the Rs. 500 limit, nor to all estimates above that limit being sanctioned by Government; but if Government, with a view to relieving themselves of unnecessary references, consider it preferable to leave some power of sanction to Superintending Engineers, some limit should, I think, be fixed on the principle proposed by me, viz., that the smaller the amount involved the higher the authority required to allow it to be charged to the land and kilns account.

6. Both the Superintending Engineer and Executive Engineer agree with me that a money limit for stock manufacture and carriage is inconsistent with the other controlling arrangements proposed and should therefore be done away with if they are adopted.

7. The Superintending Engineer, in para. 7 of his letter, states that the cost for loading materials on punts is charged to stock and not to the works concerned direct; and I see no objection to this charge going to stock. The alternative place may involve troublesome and inconvenient distribution of charges to several works.

8. The Executive Engineer states that all materials despatched during the month should be billed for in the month, and that the order has hitherto not been attended to, but would be brought into effect at once. This is important and should be enforced in future.

9. The Superintending Engineer, in para. 8 of his letter, states that all manufactured materials do pass through the stock account to debit of works. This also is important and should be enforced.

10. In para. 12 of my letter to the Superintending Engineer, I proposed that all plant should be valued every five years with a view to a reconsideration of the monthly instalments of recovery of the cost of plant, &c., debited to land and kilns; neither the Superintending Engineer nor the Executive Engineer has expressed an opinion on this point, but in my opinion a periodical re-adjustment does seem necessary in order to afford an opportunity of correcting arrangements which may have been based on an utterly erroneous estimate of the duration of this or that plant or building. It does not seem desirable that corrections of this sort should be left to chance, and a periodical review is the only alternative.

11. *Proposals with reference to starting the new system.*—The Superintending Engineer, in para. 6 of his letter, states that he considers the amount (Rs. 8,712-9-6) outstanding at the end of November 1887 against the sub-head of manufacture and carriage an actual loss and thinks that the only way of wiping it off is to charge it to such works now in progress as can stand the charges, and chiefly against the provision for unforeseen works in the delta estimates. Subject to the further remarks made below in para. 18 *et seq.*, I agree with the Superintending Engineer that any loss already incurred should be charged off at once, or at any rate the bulk of it, a fair start could then be made and all concerned should see that no similar losses are allowed to accumulate in future. If Government rule that the loss in question shall now be adjusted, it will be for the Superintending Engineer to suggest the works to be debited. I am not, however, prepared to admit that the actual loss is the amount mentioned by the Superintending Engineer, and I would suggest that the actual stock in hand be revalued as on the 1st April 1888. The settlement of this detail need not delay the decision on the points which are merely questions of principles.

12. The Superintending Engineer forwards a valuation statement of the land and kilns and plant now in existence in the Godavari Eastern Division; he values the plant at Rs. 35,332, which was the actual unadjusted balance under "land and kilns" at end of November 1887, and proposes a half yearly adjustment at 5 per cent. of the unadjusted balance under "land and kilns," but the Executive Engineer agrees with me as to the propriety of a monthly adjustment, and suggests that the present balance be cleared in ten years. The question is in principle the same as that dealt with in para. 3, and I have given my views there. As regards this particular case, I think the Executive Engineer's proposal is a reasonable one; it would mean a monthly

charge of Rs. 35,332/120 or about Rs. 300 to manufacture, subject to acceptance of the valuation by Government and subject to increase for any land and kilns items sanctioned hereafter.

13. Both the Superintending Engineer and the Executive Engineer consider that it is not necessary to keep the quarry accounts with any such refinement of accounting, or in any such elaborate detail as is indicated in para. 4 of my letter. I quite agree with both the Superintending Engineer and Executive Engineer, and I only raised the issue in order to get it settled one way or the other. I think that any such attempts at refinement will only lead to confusion. The Executive Engineer proposes to limit the quarry operations and to adopt a few estimate sub-heads which he particularizes in para. 4 of his letter, but the arrangement of the proposed sub-heads suggest that the Executive Engineer does not quite understand the shape in which a manufacture estimate should be drawn up, and it will be convenient to get this matter settled now.

14. A manufacture estimate should be in two distinct parts, viz. (1) an estimate of outlay under expenditure heads, such as Nos. 6, 7 and 8 of the Executive Engineer's list with the addition of labor and other charges, and (2) an estimate of outturn or results under such head as Nos. 1 to 5 of his list. This is not clearly stated in the Code, and I think it should be. The estimate of outturn should be drawn up under all those heads including waste and by products and outturn of different qualities of the same kind of thing which past experience shows to be necessary in classifying actual outturn.

15. The actual outturn should be debited to stock at estimate rates, but the Executive Engineer should watch the progress of operations carefully and should take prompt steps for a revision of the estimate if and when he finds that the estimate programme as regards any item or items of outlay or outturn is likely to be departed from in a manner or to an extent which will materially affect any estimate rate or rates. It is only by prompt attention to such deviations that embarrassing adjustments at the end of the season can be avoided.

16. I must add that hitherto this office has not been successful in getting an estimate for the quarry operation; for the operation of the year just expired (1887-88) no estimate has been received yet, and for the previous year the estimate was only received in September 1887, six months after the close of the year. I trust that in any order that may now issue Government would impress upon the Superintending Engineer and the Executive Engineer the necessity of preparing and furnishing to this office a proper estimate before the commencement of each season's operations.

17. Hitherto, for the purpose of accounting, the financial year has been treated as the season, the account being closed nominally at any rate at the end of each year. It is a question whether it is desirable to continue to treat the financial year as the working season. I am inclined to think that in all cases in which the necessity for some other season limits is not distinctly dictated by dependence of the operations on climatic considerations and therefore on natural seasons it would be desirable to make the closing of the manufacture account correspond with the dates of half yearly re-adjustments of stock rates. When this cannot be done, the real adjustment of any loss or profit on the manufacture operations is necessarily postponed to the date of the next ensuing stock adjustment, and this is inconvenient. This adoption of the proposal would involve half yearly estimates; but while the additional trouble would be small, the security against wide divergence from the estimate programme would be increased, and any adjustments actually required would be made much more promptly and with less disturbance of stock rates. In accordance with this principle it would be convenient to clear manufacture accounts in February and August of each year, the re-adjustment of stock rates being made after closing the accounts for March and September.

18. The following remarks are submitted with reference to the qualification in para. 11 of this letter. In his letter No. 2328 G.D., dated 2nd January 1888, the Superintending Engineer proposes to charge off to works the entire loss (Rupees 8,712-9-6) already incurred, but in a subsequent letter (to be kindly returned)

No. 2691 G.D., dated 1st March 1888 (herewith), he has suggested setting off against this loss the profit, amounting to Rs. 5,053-14-1, at the credit of the "boat officer's suspense account" under deposits of the same division.

19. I have had this suspense account for some time under consideration, and I am of opinion that the most proper course would be to bring the two accounts (quarry and boat office) together under one general suspense account "manufacture and carriage of stock," any loss on one would then, as a matter of course, neutralise the profit on the other, and another irregular suspense account would be removed from the deposit account and brought into the recognised scheme of accounts classification. The two accounts would of course continue to be kept in detail quite as separate as they are now, just as the accounts of any two works are kept distinct.

20. I must point out that the question of continuing this suspense account was dealt with in G.O. No. 530 I., dated 28th July 1886, in connection with certain suggestions of the Deputy Auditor-General, and it was decided to retain the account. It will be seen that I do not propose to discontinue the account, but only to bring it into its appropriate place in the general scheme of accounts.

21. I have no doubt whatever that the account is out of place under deposits, and my only doubt as to the propriety of classing it under stock manufacture and carriage arises from the fact that an appreciable portion of the receipts rather more than 10 per cent. in 1887 are derived from passenger traffic. These receipts should no doubt properly be brought to account under revenue direct receipts (8) Navigation materials carried on account of the works, it would be incorrect to swell the accounts of revenue and expenditure by crediting all receipts and debiting all charges to final heads. The difficulty might be got over by crediting receipts from passenger traffic to revenue and debiting working expenses by credit to stock manufacture and carriage with a rateable proportion of expenditure if it is considered that the arrangements for accommodation of passengers involve any appreciable increase of expenditure, but if this is not thought to be the case, no credit need be given to the suspense account, and the charges for carriage of materials should be so adjusted as to cover all charges, leaving the receipts from passenger traffic credited to revenue as so much clear profit.

22. In conclusion, I append a summary of the specific proposals on which orders are solicited:—

- (1) That the full cost of manufacture including all current charges to, and current instalments of, charges to land and kilns be charged to stock, no charges whatever being allowed direct from manufacture to works.
- (2) That debits to land and kilns be relieved monthly by fixed instalments determined at the time of sanctioning the expenditure as required by Code para. 1789.
- (3) That no charges whatever be allowed under land and kilns without the sanction of competent authority (to be defined).
- (4) That all repairs to items under "land and kilns" and all expenditure on works of renewal and improvements costing Rs. 500 and under be treated as current charges of the manufacture account.
- (5) That charges exceeding Rs. 500 to be sanctioned by Government, or, if Government consider it preferable, to leave some power of sanction to the Superintending Engineer, some limit to be fixed on the principle indicated in para. 13 of my letter No. 112 S. E. I., dated 18th June 1887.
- (6) That a reserve limit for the balance of the land and kilns account be done away with as inconsistent with other controlling arrangements.
- (7) That the cost of loading materials on punts be charged to stock instead of directly to the works concerned.
- (8) That all materials despatched during the month be billed for in the same month.
- (9) That all manufactured materials pass through the stock account.

- (10) That the plant and buildings remaining at debit of land and kilns be revalued every five years.
- (11) That the actual stock in hand be revalued as on the 1st April 1888 and the entire accrued loss to end of March 1888 as thus ascertained be adjusted by debit to such works as the Superintending Engineer may suggest, or that the losses on stock and the profits on the boat office account be collected under the general suspense account, viz., miscellaneous advances, in which case only the net loss, after deducting profit on boat office account, need be adjusted to debit of works.
- (12) That the Superintending Engineer's valuation of the plant, &c., corresponding with the book balance under land and kilns be accepted, and that the instalments to be charged to manufacture account (whether monthly or half yearly as may be determined) in respect of this balance be at the rate of one-tenth or Rs. 3,600 per annum.
- (13) That proper estimates of manufacturing and carrying operations drawn up in accordance with the principles indicated in para. 14 shall be punctually prepared and forwarded to the Examiner, Public Works Accounts, before the commencement of each season's operations, and prompt steps should be taken to correct the estimates and rates in accordance with ascertained or anticipated divergence from the estimate programme.
- (14) That the accounts shall be closed in February and August of each year with a view to the convenience of adjustment of stock rates in March and September, unless the working season is otherwise dependent on the natural season.

23. Since the above was written, it has been pointed out to me (by the Deputy Examiner in his notes of the recent examination of the Eastern Godavari Division office) that the so-called loss on stock manufacture account is in reality the still unadjusted balance of the sum of Rs. 16,038-13-8 referred to in para. 1 (4) of the note by the Chief Engineer for Irrigation, printed with G.O., No. 467 I., dated 3rd July 1886. There can, I think, be no doubt that the amount ought to have been originally charged to the head land and kilns and gradually adjusted to the debit of manufacture; and in my opinion, taking this to be the true explanation of the heavy loss on the manufacture account, the better plan would now be to charge the ascertained loss to land and kilns instead of to any arbitrary selected works and thus let the total charge to land and kilns be gradually adjusted at the 10 per cent. rate proposed by the Executive Engineer. The result would be to raise the immediate balance at debit of land and kilns to about Rs. 39,000, or to about Rs. 44,000 according as the profit on the boat account is or is not set off against the loss on manufacture, the present monthly charge to manufacture (on account of land and kilns) being increased by about Rs. 25 in one case and about Rs. 60 in the other.

24. The only objection that I can see to this proposal is that the Superintending Engineer has now valued the plant, &c., under land and kilns at the amount of the actual balance on a certain date, viz., Rs. 35,000 and odd, but this I take to be a perfectly arbitrary valuation which would be more correctly described as a distribution of the actual balance on the existing plant and other property, and, if so, the valuation could be corrected. The proposal now made would obviate the necessity of selecting works to be arbitrarily debited with the loss in question and would probably materially expedite the settlement of the question.

ENCLOSURES.

From the Examiner, Public Works Accounts, Madras, to the Superintending Engineer, I Circle, dated 18th June 1887, No. 112 S.E.I.

With reference to para. 10 of the notes of inspection of the Godavari Eastern Division, printed in G.O. No. 1063 W., dated 16th April 1887, I have now the honor to state my views as to the measures required in order to place the quarry accounts on a proper footing, and I shall

feel obliged if you will at your earliest convenience let me know how far you are able to concur in my views to enable me to take the orders of Government on the points, if any, as to which we are unable to agree, and also on those points as to which we may agree in desiring a reconsideration of orders already passed.

2. I understand that the practice hitherto has been to credit the quarry account on transfer of stone to stock account with a portion only of the ascertained cost of manufacture and to credit a further sum to the quarry account on the issue of stone from stock to works. It would seem difference only represented trainage and connected charges, but I understand that this was not the case, and that the difference was in fact an arbitrary one, the object being possibly, to quote the prescribed limit by valuing stock at reduced rates." It is, however, useless to inquire further as to the object with which such a practice was ever introduced; the practice is now admitted to be wrong and necessarily falsifies the balances under both manufacture and stock.

3. The proper plan, assuming, to put the matter in the simplest way, that the quarrying, lifting, moving and dressing of the stone, is treated for accounts purposes as a single operation, is to debit the quarry account with all current charges incurred at any stage of this operation and on the transfer of stone to stock to debit stock by credit to quarry account with the real cost of getting and dressing the stone as ascertained from accounts of the past, modified, when necessary, by estimates of future expenditure; and in that case all that is now required is—

- (1) to estimate the actual value of the balance of stone now in stock on the basis of actual cost in the past, modified, if necessary (that is if there is any ground for supposing that the stone will in future be got at a lower or higher cost) by estimate of future cost of getting, and
- (2) to debit stock by credit to quarry account with the difference between the present book value of the stone in stock and its ascertained real value.

Subsequent debits and credits should then be regulated strictly on the principle stated at the beginning of this paragraph.

4. It is possible, however, that, with a view to a better control over the expenditure in the various states of the quarrying operations—jumping and drilling, blasting, moving, cutting and dressing and so on—and over stock lying in different places, it may be well to keep the accounts so as to show separately the cost of these several operations treating them as sub-heads of the work, and it may further be advisable to keep the accounts in such a way as to show from time to time the balance of stone at certain stages in the operations, e.g., to show separately the quantity and cost of rough stone and the quantity and cost of stone in process of working. This would in fact probably be necessary if any part of the stone, even the quarry waste, is broken up into road metal, as a separate account of the manufacture of road metal will then be wanted. In this case it will be necessary at starting to make separate estimates of the values of the finished stone (presumably borne on the stock account) and of the stone still in process of working: then if A be the ascertained value of the stone in stock and B its present book value, C the estimated value of the stone in process of working, and D the amount now at debit of quarry account, the new balances should be as follows:—

Stone in stock	...	...	...	...	...	A
Stone in process of working	...	...	...	...	...	C
Rough stone	...	...	...	...	...	B+D-A-C

The combined balance of stock and manufacture remaining at its present amount of ... B+D

The necessary estimates having been made, the required new balances in the divisional accounts would be produced by suitable entries in the adjustment book of the division, and subsequent debits and credits should be regulated on the principle of charging to rough stone all current expenditure on sub-heads prior to the commencement of working the stone plus the prescribed charge on account of land and kilns, as to which more hereafter, charging to stone in process of working (by credit to rough stone) the average cost of the stone transferred from one stage to the other, and (by credit to cash or other account concerned) all current expenditure in subsequent stages, and, finally, debiting stock (by credit to stone in working) with the average cost of stone transferred.

5. Any such refinement as is suggested in the last paragraph may, however, be unnecessary, but I have mentioned it here with the object of eliciting your opinion, and I shall accordingly be glad if you will consider the question of the detail in which it will be desirable to keep the quarry accounts.

6. Then as to the adjustment of expenditure which does not come under the head of "current" charges. This includes the balance now at debit of the head land kilns—vide para. 13 of the Deputy Examiner's notes and all future expenditure on objects such as are therein mentioned so far as such expenditure cannot in future be dealt with as current.

7. In my opinion this account (land kilns) should be viewed with the utmost jealousy, and charges to it should be allowed only under very exceptional circumstances. All expenditure on repairs to quarry hungalows, on dredging and silt clearing, and on extensions or shiftings of tramways, such as are of frequent occurrence should be treated as current charges, and all expenditure on works of renewal or relaying or improving should be treated as current charges if under a certain amount (say Rs 1,000) for each individual work, and, further, no charges whatever should be allowed to land kilns without either (1) the sanction of Government, who should at the same time determine the amount of annual adjustment in respect of any such charge, or (2) the sanction of the Superintending Engineer with the concurrence of the Examiner, Public Works Accounts, as to the annual adjustment.

8. In G.O. No. 467 I, para. 2, Government ruled, as to this matter, that the present procedure does not require any change. They rejected my predecessor's proposal to charge off a fixed sum monthly on the strength of your, or your predecessor's opinion "that the present system of adjusting a share of the expenditure in proportion to the extent of manufacturing operations should be continued, as the extent of operations varies every month; and that, as the present value of the property charged to this head is reported to be not less than the unadjusted balance, there need be no delay in adjusting the proportionate share of the expenditure."

9. Dealing first with objections based on the fluctuating extent of the monthly operations, and assuming that there is any solid ground for such objection, I would point out that the difficulty can be got over in a very simple way. Instead of a charging off month by month an absolutely fixed sum on account of each item not treated as a current charge, calculate what percentage that fixed sum bears to the average amount of the monthly operations (for a series of years) and then charge off monthly that percentage on the amount of the actual operations of each month. The result in the end will be practically the same, and the difficulty will disappear.

10. I question, however, whether there really has been in the past, or, if the present system is continued, there is likely to be in the future that nice adjustment of charges to extent of operations which is supposed to justify the present practice. The quarry accounts show that during the last five years the gross charges to manufacture account, the value of outturn and the credits to land and kilns have been as follows:—

Year.	Gross charges to manufacture account.	Value of out-turn.	Credits to land and kilns.
	RS.	RS.	RS.
1882-83	32,549	35,865	Nil.
1883-84	52,789	58,578	9,500
1884-85	76,686	70,724	Nil.
1885-86	63,296	53,288	12,500
1886-87	36,267	45,382	1,000

The credit of Rs. 9,500 in 1883-84 was given in one month: the credit of Rs. 12,500 in 1885-86, thus—two months nil, then two months Rs. 2,000 each, then five months at Rs. 1,000, one month at Rs. 1,500, and again two months at Rs. 1,000; in the first month of the following year again Rs. 1,000, and after that up to date nothing. There is no trace here of careful adjustment. The result is, I think, just what might be expected under the circumstances. The theory probably is that the matter is considered carefully every month with reference to the output of the month; but in practice, when the accounts have to be completed, it is found that this careful consideration has not been given, and the matter is either postponed from month to month or it is settled roughly as in 1885-86. What is wanted is a procedure that works itself automatically and regularly in the place of one that requires to be worked and which is almost certain to be worked by fits and starts.

11. As for the fact, if it still remains a fact, that the present value of the property charged to land and kilns is not less than the unadjusted balance under that head, I fail to see that this consideration need in any way affect the principle on which these adjustments should be based. In starting the new system of adjustments on the principles stated above, one of the first steps will necessarily be to value the present plant. I mean, of course, to make a detailed valuation, not a "rough estimate" or guess. If this valuation shows that the value (A) of the plant is less than the unadjusted balance (B) under land and kilns, it will be for Government to decide (1) quite arbitrarily in how many years, i.e., either at what monthly fixed sum or at what monthly percentage on charges of manufacture or on value of outturn the difference B-A is to be cleared off, and (2) on the basis of the usual rules for depreciation of various classes of plant and machinery, in how many years the value (A) is to be charged off, the latter being possibly divided into classes for the purpose. Due consideration will, in this way, be given to the greater or less

permanence of the value of existing plant. If A is greater than B, so much the better; but in that case it will probably be well to take the balance at debit of *land and kilns* as the value of the plant, i.e., make $A = B$ and adjust the details of the book valuation accordingly, the alternative being to introduce a credit item under *land and kilns*, which should be gradually eliminated by monthly credits to manufacture.

12. Rules for depreciation are of course based on average experience, but they fail in particular cases, and therefore it will be well to lay down that the plant shall be revalued and the monthly fixed sums or monthly percentages, as the case may be, as far as they relate to such plant, re-adjusted periodically, say, every five years.

13. In para. 7 I have suggested that no charge should be allowed to the head *land and kilns* on account of any work, operation, or object the estimated cost of which is less than Rs. 1,000. Having regard to the extent of the annual operations, I do not think Rs. 1,000 is too large a sum; but it is only a suggestion, and if, whilst agreeing with me in principle, you think a limit of Rs. 1,000 would be too large, you will no doubt suggest a more suitable limit. The point is to make it a rule that no charge shall go to the suspense account *land and kilns* unless it is really of such magnitude that it would seriously disturb the manufacture account if charged off as a current charge. All suspense accounts have a tendency to become sinks, but there is no class of suspense accounts in which this tendency is so marked as it is in accounts of capital or quasi capital expenditure on manufacturing operations. It is so very easy to charge such expenditure to suspense and leave the difficulty to be solved by somebody else at some future time. Then from Rs. 1,000, or whatever limit may be approved, up to some higher limit, every charge to *land and kilns* should require the sanction of Government; above that limit the sanction of the Superintending Engineer with, I think, the concurrence of the Examiner as regards the monthly adjustment, provided of course that the work itself is within the Superintending Engineer's power of sanction, for if the work itself required the sanction of Government, the incidence of the charge would naturally be fixed by the same authority. It may seem here that the ordinary rule as to competence of authority, the greater the sums the higher the authority, is inverted; but the point is to prevent comparatively small items being placed in suspense when they might just as well be charged off, and the smaller the item the greater the objection to placing it in suspense, consequently the smaller the item the higher the authority required for placing it in suspense.

14. In G.O. No. 467 I., dated 3rd July 1886, on the suggestion of my predecessor, Government ruled, and afterwards gave effect to the ruling in G.O. No. 639 I., dated 17th September 1886, that a money limit should be fixed for the charges to *land and kilns*; but it will be evident that if the adjustment of credits to *land and kilns* is regulated in the manner now suggested, and if expenditure on all items of charges to *land and kilns*, not only "expenditure on important items under this head" as approved in G.O. No. 467 I., is "regulated by estimates previously framed and sanctioned by competent authority," any definite limit to the debit balance under *land and kilns* is unnecessary. In point of fact it would be impracticable as it might conflict with the result of the other regulating principles, sanction for each individual charge and a fixed scale for the gradual extinction of such charges.

15. With reference to para. 3 of G.O. No. 467 I., I would say that there must of course be separate accounts of stock of stone at separate places. If there were, for instance, two quarries and three landings or wharves, there should be five accounts and five balances. I do not mean that the Executive Engineer should necessarily submit five accounts to me, but that his account should (locally) be so sub-divided as to show separate balances for each quarry and each landing or wharf. This is a matter closely related to the subject of para. 4 above.

16. In connection with trainage, &c. (still para. 3 of G.O. No. 467 I.), it may be a question to this I should say that if there is any wharf or wharves to one or other of which all or nearly all stone is carried before being distributed to works, then all charges up to that wharf should go to the debit of stock at that wharf and all subsequent charges to the works concerned. This, I believe, is the present practice.

17. The expenditure in removing top earth (para. 4 of G.O. No. 467 I.) is simply one item under *land and kilns* and requires no very special consideration; the adjustment of stock transfers (para. 5 of Government Order) is, I understand, now carried out as ordered; all materials manufactured (para. 6 of Government Order) should I think unquestionably pass through the stock account.

18. If the value of plant comes out less than the total balance at debit of *land and kilns*, it may be a question whether some portion of this balance should not be charged off to works now in progress which may have escaped their full share of charges for materials in past years through failure to relieve the head *land and kilns*. Please take this into consideration if necessary, but unless the net uncovered balance is very large, which seems improbable, it will be better not to disturb past transactions.

19. I will now summarise, for your convenience, the proposals and matters as to which I solicit your opinion:—

A.—Proposals, &c., for guidance in future—

- (1) Stock to be charged with full cost of manufacture including all current charges, and the prescribed monthly proportion on account of charges in suspense under *land and kilns*—see paras. 2, 3 and 4.
- (2) No charge whatever to be placed under suspense (*land and kilns*) without the sanction of competent authority (to be defined)—see paras. 7 and 13.
- (3) Every item charged to *land and kilns* to be gradually extinguished by crediting to that head (by debit to manufacture) either a fixed monthly sum or a fixed monthly percentage of value of outturn (or of gross charges to manufacture, as may be approved), while a monthly sum or percentage is invariably to be determined by the authority sanctioning the charge at the time of according sanction.

(N. B.—It will not be necessary to keep a Dr. and Cr. account of each item, the monthly sums or monthly percentages can be applied in the lump)—see paras. 7 to 13.

- (4) No item whatever estimated under Rs. 1,000 (or other approved limit) to be charged to *land and kilns*.

(N. B.—This will not absolutely bar Government sanction, but it will prevent proposals except under very extraordinary circumstances—see paras. 7 and 13.

- (5) No item estimated between Rs. 1,000 and Rs. — to be charged to *land and kilns* without the sanction of Government—see paras. 7 and 13.

- (6) Unless already sanctioned by Government, no item estimated between Rs. — and Rs. — to be charged to *land and kilns* without the sanction of the Superintending Engineer with the concurrence of the Examiner as regards the monthly adjustment—see paras. 7 and 13.

- (7) Money limit for stock manufactured to be done away with as inconsistent with other controlling arrangements.

- (8) Charges for carriage to wharf to go to stock, all carriage beyond that point to be charged to works concerned—see para. 14.

- (9) Adjustment of stock transfer to be promptly made as ordered in G.O. No. 467 I. This is now done.

- (10) All manufactured materials to pass through stock account; no charge to pass directly from stock to works.

- (11) Plant to be revalued every five years and monthly sums or percentages in respect of such plant to be recovered accordingly—see para. 12.

B.—Proposals with reference to starting the new system—

- (12) Estimates to be made of actual value of stone in stock and in different stages of manufacture and at different places, and corresponding book balances to be produced by suitable adjustment entries in the accounts—see paras. 3 and 4.

- (13) Valuation to be made of plant now in use and Government to prescribe monthly sums or monthly percentages in respect of such values or of sub-divisions thereof, and also in respect of the differences, if any, between the debit balance under *land and kilns* and the value of plant in use (in other words the uncovered balance)—see para. 11.

- (14) If the valuation is in excess of the balance, the form to be revised and made equal to the latter—see para. 11.

- (15) If the net uncovered balance at debit of *land and kilns* is large (but not otherwise), some portion of it to be perhaps charged off direct to works in progress as their share of expenditure escaped in past years—see para. 18.

20. I shall feel obliged if you will give your early attention to this matter and favor me with your opinion as on the above proposals and remarks generally, but I may point out that as to certain matters a specific and definite expression of opinion is necessary, namely—

- (a) The matters referred to in para. 5.
- (b) The definition of the authority for works, &c., chargeable to *land and kilns*—see para. 19 A (2).

- (c) Whether the debits to *land and kilns* should be relieved by—
 - (1) a fixed monthly sum, or
 - (2) a fixed percentage and value of outturn, or
 - (3) a fixed percentage on gross charges to manufacture
 in respect of each item—see para. 19 A (3).

- (d) The money limits in para. 19 A (4), (5) and (6).

I mention this lest you should overlook the fact that, as regards these points, it would not be sufficient to express a general concurrence in my proposals, supposing that, on consideration, you should find yourself generally in agreement with me.

From G. T. WALCH, Esq., Superintending Engineer, I Circle, to the Examiner of Public Works Accounts, dated Dowlaishweram, 2nd January 1888, No. 2328 G.D.

With reference to your No. 112, dated 18th June 1887, I have the honor to enclose copy of letter No. 527, dated 4th October 1887, from the Executive Engineer, Eastern Division, Godáviri, whom I considered it advisable to consult on the subject of the quarry accounts.

2. His letter you will see does not deal very definitely with many of your proposals, with reference to which I will now give my opinion.

3. I consider quite unnecessary any such refinement as trying to keep the accounts, so as to show separately "the expenditure on various stages of the quarrying operations" * * or "to keep the accounts in such a way as to show, from time to time, the balance of stone at certain stages in the operations."

4. I quite agree that, as now, the stock should "be charged with the full cost of manufacture" plus a periodical (say half-yearly) charge to the general head "manufacture and carriage" of a per-centage (say 5 per cent.) of the outstanding value of land and kilns and plant for depreciation.

5. I concur with your view that "land and kilns account (which in 1884-85 ran up from Rs. 7,730 to Rs. 33,302) should be viewed with the utmost jealousy," and that "all expenditure on repairs to quarry bungalows, on dredging and silt clearing, and on extensions or shiftings of tramways, such as are of frequent occurrence, should be treated as current charges; and all expenditure on works of renewal, or relaying, or improving should be treated as current charges if under a certain amount;" that amount I would fix at Rs. 500 for each individual work. Above that amount I would recommend that all such charges should require the sanction of Government.

6. A money limit for stock manufacture and carriage is "inconsistent with other controlling arrangements," and "should therefore be done away with;" and here I may mention that I consider the amount (Rs. 8,712-9-6) outstanding at the end of November against the head of "manufacture and carriage" represents actual loss on transactions to date; the Executive Engineer hopes to clear this off by degrees by profit to be made on future transactions, but I am not very sanguine in the matter, and I think the only way of wiping out the amount is by charging it to such works still in progress as can stand the charges, chiefly the "unforeseen works" provision in the "completion estimates" of the Godáviri District.

7. "Charges for carriage to wharf" should continue to be, as now, charged to stock, and "all carriage beyond that point should be charged to works;" this is now the case except as regards the loading, the cost of which has hitherto been charged to stock and included in the price of the materials.

8. All manufactured materials do now, and should continue to, pass through the stock account on their way to works.

9. I enclose a valuation statement of the "land and kilns and plant" now in existence; the valuation received from the Executive Engineer was Rs. 40,000, but I have revised it and made it equal to the balance shown in the November accounts. The values entered in the statement are I consider fair, regarded in the light of usefulness to the quarries, &c., but from the nature of most of the items the values in the market would be but small. Quarry channels, for instance, which have cost more than shown in the statement, are worth much in facilitating and cheapening quarry operations, but would be worthless for other purposes.

10. I regret the delay which there has been in dealing with this matter.

ENCLOSURES.

STATEMENT showing the present valuation of the different works charged to stock, land and kilns.

	RS.
Quarry office, Dowlaishweram	1,000
Lime kilns, &c., at Dowlaishweram	1,800
Do. at Rajahmundry	600
Old loading channel at Dowlaishweram	1,000
New loading channel at do.	6,000
Kesavaram loading channel	2,000
Razole loading channel	6,000
Wharf wall in old river loading channel, Dowlaishweram	1,600
Tram line at Dowlaishweram quarry	5,000
Do. at Yerrampalem	4,332
Surki sheds and kilns at Dowlaishweram	3,000
Waggons and tools and plant	3,000
Total	35,332

(Signed) G. T. WALCH,
Superintending Engineer, I Circle.

From the Executive Engineer, Godáviri Eastern Division, to the Superintending Engineer, I Circle, dated Dowlaishweram, 4th October 1887, No. 527.

With reference to the letter, No. 112 S.E. 1st, dated 18th June 1887, of the Examiner of Public Works Accounts, forwarded with your No. 828 G.D., of 26th June 1887, I have the honor to state that I agree with the Examiner of Public Works Accounts that the system of keeping accounts of manufacture of stone requires improvement both as regards the operation and outturn.

2. I do not think, however, that any elaborate details are required to be kept up, such as are referred to by the Examiner of Public Works Accounts in para. 4 of his letter. I would state my views briefly as follows.

3. The present operations consist of quarrying and of dressing, where necessary, building stone, groyne stone, concrete, two sizes of cyclopean stone, five different kinds of cut stone dressed faces, arched faces and flooring stone. Much confusion arises from dealing with these numerous classes of stone both in the compliance of indents and in the accounts. The Executive Engineers do not like this system so well as the old one, viz., of sending all stone to the works as quarried where it can be dressed as required. I propose therefore that only the following classes of stone should be dealt with in the quarry in future:

Building stone,	Cyclopean stone, and
Groyne stone,	Specially prepared stone.
Concrete,	

The last item is introduced to cover contingent cases of any specially ordered stones, but it would be very seldom used.

4. The sub-heads of the estimate for manufacture should, I think, be also altered. At present we mean to continue to buy every thing ready made at the loadings. The only manufacturing operation now in progress is a little cut-stone, and that will be stopped shortly. Sub-heads quarrying, dressing and carriage may, therefore, be omitted in the estimate which may be framed as follows to see what the absolute cost of each class of stone is for delivery on boats:

Sub-heads of estimates—

- (1) Building stone.
- (2) Groyne stone.
- (3) Concrete.
- (4) Cyclopean stone.
- (5) Specially prepared stone.
- (6) Temporary establishment.
- (7) Repairs to quarry channels, railroads, &c.
- (8) Proportionate adjustment of expenditure of previous years on lands and kilns.

5. Expenditure on repairs to quarry bungalows, dredging, silt-clearing in quarry channels, repairs to tramway and improvements, costing Rs. 200 and under, should be treated as current charges and debited to the estimate for manufacture (sub-head No. 7) instead of to land and kilns. Expenditure under this head will be jealously guarded, and working estimates invariably sanctioned by the Executive Engineer prior to commencement of the work.

6. All new works and improvements to the tramways, &c., estimated to cost over Rs. 200 should, I think, continue to be debited to head "land and kilns," and the expenditure allowed to be gradually adjusted against manufacture in the manner prescribed in para. 1789 of the Public Works Code. The estimates for new works should, as a rule, be sanctioned by the Superintending Engineer, who will determine the number of instalments in which such expenditure should be adjusted against manufacture.

7. The expenses for loading the stone on punts should be charged against the material for which they were expended. So that the total cost of each class of stone delivered on boats could be seen at the end of each month. I would suggest that charges for loading should be paid for at once and not left, as has been the custom, until the materials despatched have been acknowledged, sometimes causing a delay of months, which makes it very difficult to obtain extraneous labor when a sudden demand occurs. No doubt a slight loss would arise from small excess payments, but this would be made up by the quicker despatch of boats.

8. All materials despatched to works during the month must be billed for in the month. This has been sanctioned in para. 5 of Notes of Chief Engineer for Irrigation, printed with G.O. No. 467 I. of 3rd July 1886. For some reason or other, the system has not, however, been brought into effect, but it will be done so at once, as it will simplify matters both in connection with issues of stock and account of materials at site of works. Any short acknowledgment of materials, which is in excess of 5 per cent., would have to be settled afterwards in communication with divisional officers concerned.

9. The estimates of outturn should be so prepared as to cover the full cost of manufacture including all current charges and the prescribed monthly proportion of adjustment on account of charges under land and kilns.

10. Money limit for "stock manufacture" and "land and kilns" are to be done away with, as inconsistent with other arrangements.

11. As regards the adjustment of expenditure under land and kilns, I beg to state that the value of the property charged to land and kilns is not less than the unadjusted balance under that head. A detailed statement is prepared and herewith attached. I would propose that the balance at debit of land and kilns, viz., Rs. 34,000, be adjusted in ten years hence. The necessary adjustment may be made monthly in divisional accounts, as stated by the Examiner in para. 9 of his letter.

12. The stone in quarries is now being brought to the different loadings. As soon as this is done, the difference between the present book value of stone and its selling price will be debited to stock and credited to manufacture as stated by the Examiner, Public Works Accounts, in para. 3 of his letter.

From G. T. WALCH, Esq., Superintending Engineer, I Circle, to the Examiner of Public Works Accounts, dated Madhoburda, 1st March 1888, No. 2691 G.D.

I have the honor to request that the matter dealt with in letters No. 77, dated 2nd August 1887, and No. 96, dated 12th September 1887, from the Executive Engineer, Eastern Division, Godavari, to you and your reply No. 243, dated 24th September 1887, may be settled as soon as possible, and that, if possible, the profit made on the "boat account" chiefly derived from carriage of materials may be taken to credit of "stock."

2. Till the matter is settled, I cannot deal with the loss under "stock" about which positions must be made for consideration of Government.

No. 201 D.

As the subject of this correspondence intimately affects irrigation accounts, I shall be glad of your opinion on the Examiner's proposals before finally disposing of the matter.

19th May 1888.

(Signed)

J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation

Note by the Chief Engineer for Irrigation.

I agree with the Examiner in para. 23 of his Note that the sum of Rs. 16,038-13-8 ought to have been charged to land, kilns, &c.; this has already been ordered (on the Chief Engineer for Irrigation's suggestion) to be so charged in G.O. No. 467 I., dated 3rd July 1886. This, when carried out, will make the debit of land and kilns about Rs. 44,000.

2. I agree with the Superintending Engineer that the Rs. 5,053-14-3, the sum at the credit of the boat office, may be credited to stock, land and kilns, reducing, as pointed out by the Examiner, the debit to about Rs. 39,000. No doubt, strictly speaking, this receipt or rather a portion of it should be credited to revenue, but I see no reason for this nicety now, and would credit it to stock.

3. The valuation of the land and kilns by the Superintending Engineer is Rs. 35,332; this is a perfectly arbitrary valuation, and I agree with the Examiner that it may be raised to the Rs. 39,000 now proposed to be placed to the debit of land and kilns, and this will, as pointed out, get over the necessity of charging arbitrary amounts to certain works.

The values entered of the loading channels from the quarries are absurdly below their present value to the quarries and of course not a fraction of their original cost; therefore the Rs. 3,300 proposed to be added may be safely done.

4. With regard to the Examiner's proposals, No. 1, I agree. Nos. 2 and 12. I see no reason for the payment of Rs. 3,600 per annum to be charged to manufacture and placed to the credit of land and kilns on the adjusting of the total present debit of Rs. 39,000 in about 11 years. There is no reason for us to wipe out the whole of the debit; as long as we have value for it, it may remain a debit.

The tram lines, wagons, plant, &c., will require renewal besides maintenance which will be provided for. The canals and channels do not. I consider with the Superintending Engineer that a payment of about 5 per cent. will suffice. Let it be a fixed sum for the present, say, Rs. 2,500 per year.

Nos. 3 and 4 accepted.

No. 5. I would make this proposal thus, that charges exceeding Rs. 500, provided they do not exceed Rs. 1,000 in a year, can be sanctioned by the Superintending Engineer, but if they exceed Rs. 1,000 the sanction of Government be necessary.

No. 6. Agreed.

No. 7. Not required; this has been already ordered, and is being carried out.

No. 8. Do. do. do.

No. 9. This, I believe, is ordered and long carried out.

No. 10. I see no objection to this, but the valuation can be but of little value.

No. 11. See para. 2 of this Note.

As ordered in G.O. No. 530 I., dated 28th July 1886, the boat office account is to be kept separate. I see no reason, as proposed by the Examiner, to make it with quarry account, a suspense account.

No. 12. See above under No. 2.

Nos. 13 and 14. There can, and must, be difficulties in preparing what the Examiner calls proper estimates for the quarry operations, and I agree with the Superintending Engineer that the refinement proposed by the Examiner in his first letter is impracticable and useless. The Examiner gives this up in para. 13 of his note, but considers the Executive Engineer does not understand what a manufacture estimate is.

The items of the Executive Engineer's proposed sub-heads Nos. 1 to 5 are not outturn; they are purchases from petty contractors and not as the Examiner thinks outturn or results; they are expenditure, and the rates at which these materials, Nos. 1 to 5, supplied to works have to be charged, will be made to include the expenditure on all the sub-heads Nos. 1 to 8.

I see no necessity for the amount being closed half-yearly. I think once a year is ample. I am doubtful when the best time for this would be. I would suggest the 1st June, but think it advisable the Superintending and Executive Engineers should be consulted.

Once a year is ample for the adjustment of stock rates.

I do not agree with the Examiner that half-yearly estimates, &c., would give but little additional trouble; it would add but little to the security against wide divergence from the estimates.

The estimates can be nothing more than rough approximation, and the accuracy which the Examiner appears to wish for must not, and cannot, be hoped for.

22nd May 1888.

(Signed)

H. R. MEAD, Colonel, R.E.,
Chief Engineer for Irrigation.

Office Note from the Examiner, Public Works Accounts, dated Madras, 18th July 1888, No. 1909.

I submit the following remarks on Notes by the Chief Engineer for Irrigation.

2. *Paras. 1, 2 and 3 of the Chief Engineer for Irrigation.* No remarks necessary.

3. *His para. 4. My Nos. 1, 3, 6, 7, 8, 9, 10, 11 and 13.* No remarks necessary.

4. *His para. 4. My Nos. 2 and 12.* The rule of Code para. 1789 is clear, that all charges to land and kilns must be gradually cleared. The proposal of the Chief Engineer for Irrigation of a 5 per cent. charges barely provides for interest on capital sunk, and leaves nothing worth numbering for sinking fund. In G.O. No. 1833 W., dated 19th June 1888, Government have approved of the principle of an extreme limit of 12 or 15 years. It may be perfectly true that, as far as can be foreseen, the quarrying will continue for ever, and the canals and channels will never require renewing; but it is impossible to be certain that the quarry will not be abandoned in

ten or twelve years, or that the canals and channels will not become useless: moreover, the canals and channels are only a part of the block, the rest of which is admittedly perishable. Taking everything into account, it seems to me that, according to all recognised standards for depreciation, 10 per cent. is a very moderate charge. In fact, if a charge of only 5 per cent. were sanctioned, I should be obliged to press the reconsideration of the matter with reference to Code para. 342, because the principle of steadily clearing all charges to land and kilns is one of the most important matter in connection with manufacture accounts.

5. *His para. 4. My No. 5.* I think this should be settled in accordance with the general rules already approved in G.O. No. 1833 W., dated 19th June 1888. The proposal of the Chief Engineer for Irrigation would only allow the Superintending Engineer to sanction in each year one additional debit to land and kilns. I doubt whether it is worth while further complicating the rules to secure this. At any rate, I think it would be better first to try the rules as they are for a time.

6. *His para. 4. My No. 11.* The boat office account is a suspense account already; but being kept under deposits it is objectionable for the reasons stated (in respect of the boat numbering account) in my Office Note No. 1409, dated 27th April 1888, printed with G.O. No. 273 I., dated 8th May 1888. This is purely a matter of account, and will not affect the Executive Engineer in any way; but as a question of account, I must press it; as it is most undesirable to perpetuate the system of recording under miscellaneous advances and deposits, receipts and charges connected with the regular business of the department. If this account is not brought under stock manufacture and carriages, there can be no ground for setting the gain on this account against the loss on the manufacture account, and the latter must be adjusted by arbitrary debits to works.

7. *His para. 4. My No. 14.* I see that I misunderstood the Executive Engineer.

8. *His para. 4. My No. 16.* I must ask that the necessity of punctual submission of estimates at, or before, the beginning of the season, may be insisted on. If, when the Chief Engineer for Irrigation says there must be difficulties in preparing estimates, he means that there must be difficulties in preparing them and submitting them punctually, I confess I do not follow him. At the beginning of each season the Executive Engineer knows what he did in the previous season, and he also knows whether he does or does not propose to do more or less, or in any way to modify the programme. If he has no definite change of programme in view, he can surely submit, at the very beginning of the season, an estimate based on the working of the previous season. If he proposes a change of programme he can modify the estimate accordingly. His estimate will necessarily be subject to modification, or duration, later on, but there is no reason that I can see why he should wait until the season is over before preparing any estimate at all. He ought to be able to submit, on any date that may be fixed, an estimate of his operations as thus foreseen or contemplated.

9. *His para. 4. My No. 17.* The suggestions regarding alterations of dates of closing accounts may be considered dropped.

ORDER—dated 17th August 1888, No. 2523 W., Public Works.

The above correspondence relates to the stock accounts of the Godáviri Eastern Division and the measures necessary for placing the quarry accounts on a proper footing.

2. These accounts have formed the subject of elaborate inquiry, extending over a considerable period, and in paras. 22—24 of his Office Note, No. 1472, dated 11th May 1888, the Examiner appends a summary of the specific proposals which he now submits for the orders of Government.

3. Having taken the opinion of the Chief Engineer for Irrigation on these proposals, the Government proceed to pass the following orders.

4. The sum of Rs. 16,038-13-8, referred to in para. 23 of the Examiner's Note, being the cost incurred in removing the top earth at one corner of the quarry, should be charged to the head "land and kilns," and the sum of Rs. 5,053-14-3 at the credit of the boat account, credited to the "land and kilns account," as proposed by the Superintending Engineer.

5. The Examiner's proposals Nos. 1, 3, 6, 7, 8, 9, 10, 11 and 13, are approved, and may be carried out.

6. In regard to 2 and 12, the Chief Engineer for Irrigation has suggested a charge of 5 per cent. to the manufacture account, or Rs. 2,500 a-year, in order to clear the land and kiln account. The Examiner points out that this will barely suffice for interest on the capital sunk, and will have scarcely anything for a sinking fund; and that as the account should be cleared within a reasonable period, in accordance with the principle approved in G.O. No. 1833 W., dated 19th June 1888, a charge of 10 per cent. as proposed by him is not excessive. The higher rate may be adopted.

7. *No. 5.*—The limits of sanction will follow the general rules approved in G.O. No. 1833 W., dated 19th June 1888.

8. *No. 14.*—The suggestion regarding alterations of dates of closing accounts has been withdrawn by the Examiner.

(True Extract)

(Signed) J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

Exd. F. R. Bantleman.
Spare Copies

GENERAL.
ACCOUNT.

Gobt. of (1888) Madras.
PUBLIC WORKS.

Dated August, 17th.

Recd.

Encl.

G.O., 17th Aug. 1888, No. 2523 W.

AUGUST.

Godavari, Eastern Division

Stock Accounts.—Orders on correspondence relative to the — and the measures necessary for placing the quarry accounts on a proper footing.

1ST NOVEMBER 1888, No. 3461 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers:—

From J. W. RUNDALL, Esq., M.I.C.E., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Uthamacheri, 3rd July 1888, No. 759 T.J.

With reference to G.O., No. 1672 W., dated 7th June 1888, calling for a report with respect to fixing a reserve limit for stock in the Negapatam division, I have the honor to state that, in memorandum No. VI/2 T.J. of 9th January 1888 of the Chief Engineer for Irrigation, the reserve stock of concrete blocks required at the several head works has been fixed at 5,700 cubic feet (or 2,850 blocks), amounting in value to Rs. 800, at Rs. 14-1-0 per 100 cubic feet. This amount will, however, be for some time exceeded, as the old cubes, &c., scattered over the division, which were bought in excess of actual requirements for sluice repairs some years ago, and which have hitherto been called materials at site, are to be treated as "stock" until they can be used up.

2. A detailed list of the above surplus materials or of the excess stock, amounting in value to Rs. 1,372, is submitted herewith for orders.

3. With reference to para. 2 of the Examiner's note, recorded in the Government Order under reference, it is observed that the work commenced by the Executive Engineer without sanctioned estimate is only one, but two payments to separate piece-workers on the same work, viz., annual maintenance repairs.

No. 91 E.W.

Note by the Chief Engineer for Irrigation.

As, in the Tanjore and Negapatam divisions, it is very difficult during the period of floods, owing to bad roads and extensive cultivation, to cart materials to the various head works to make good any damage which may occur, it has been judged advisable at each of such head works to keep in stock a quantity of materials (stone) sufficient to meet all urgent repair requirements.

2. The quantity of material (stone) so kept in stock is the average calculated from the actual requirements of each work during a number of years.

3. The value of this reserve stone used formerly to be charged to stock, but now under para. 1648 of the Public Works Code it is debited to maintenance and repairs, it being considered unnecessary to debit to "stock," a suspense head, the value of materials which are collected for eventual use on a definitely known work.

4. The Superintending Engineer, VI Circle, in submitting for approval an estimate for a larger quantity of materials to be reserved for repairs suggested that the cost of materials should, as was formerly done, be charged to stock; the account of the materials would then undergo the Examiner's scrutiny.

* 5. In reply to a reference made, the Examiner of Public Works Accounts says that the cost of materials should continue to be charged off finally to estimates; a monthly statement of receipts and issues of the materials at each head work being

kept in form No. 83, and to allow of a proper record of the materials being kept, the Executive Engineers should be directed to follow the procedure indicated in Code para. 1859 for accounting for road metal, a half-yearly return of the materials being submitted to the Examiner of Public Works Accounts as in the case of tools and plant.

6. Although the particular works, for the repairs of which the materials held in reserve will be used, are known, still the nature and estimate amount of repairs and the quantity of materials likely to be required at any particular time cannot be ascertained and, as already stated, the quantity of reserve material at each work being based on the general experience of past years cannot therefore be exactly suited to any specific requirements.

7. Under the present system separate estimates for the collection of such quantity of materials as is judged necessary for each head work are sanctioned and charged to maintenance and repairs. It is open to question whether the mere collection of materials which may or may not be utilised on a particular work at some future time can rightly be considered a repair work and be charged to maintenance and repairs.

8. In the Godáviri delta the cost of reserve stone is so charged to maintenance and repairs, but the procedure suggested by the Examiner of Public Works Accounts for accounting for reserve stone charged off to repairs is not in force at present. In the Kistna delta no stone is reserved for repairs at the sites of the works.

9. The Examiner of Public Works Accounts says that the cost of materials in reserve can in all cases be treated as stock if Government is willing to lock up Provincial funds for Imperial works.

10. When stock required for Imperial and Provincial works can be kept distinct, there would appear to be no necessity for charging all stock to Provincial funds unless the keeping of two separate stock accounts—one for Imperial and the other for Provincial funds—be considered objectionable; so long, however, as Provincial funds bear all expenditure on suspense accounts, their liability to be locked up for the benefit of Imperial works cannot be avoided.

11. The value of the stock of the Dowlaishweram workshops primarily intended for the Godáviri delta works is charged to Provincial funds, as also expenditure incurred in England on stores wholly required for Imperial major works. Under these circumstances it is suggested that all materials, except those collected for specific works or repairs, for which estimates have been or can at once be prepared, should be borne on stock accounts until they are issued or used up for works.

CHEPÂK,
16th December 1887.

(Signed) H. R. MEAD, Colonel, R.E.,
Chief Engineer for Irrigation.

To the Chief Engineer, Public Works Department.

Office note from the Examiner of Public Works Accounts, dated 4th October 1888, No. 2360.

The effect on Provincial funds will of course be that Provincial funds to the extent of the required Imperial stock balance will be permanently locked up and be made unavailable for Provincial purposes.

2. When I said that the cost of the materials in reserve can be treated as stock if Government is willing to lock up Provincial funds for Imperial purposes, I suppose that there was really some doubt as to the works for which the materials would be eventually used; but it seems clear from para. 6 of note from the Chief Engineer for Irrigation that this is not the case. The works are known, and in accordance with Code para. 1648 materials purchased for a particular work and kept at the site of that work must be at once debited to that work. Code para. 1648 is based on the Government of India Code, volume I, chapter XII, para. 17, and any modification of it will require the approval of the Government of India.

3. With reference to para. 7 of note from the Chief Engineer for Irrigation, there can be no question that materials collected for a particular work at the site of that work for future use on repairs of that work can be charged at once to a repair estimate for that work; in fact, the rule quoted above requires this to be done. If there should be a subsequent transfer of any part of the materials, it would have to be dealt with like any other transfer of materials from one work to another.

4. Referring to para. 5 of note from the Chief Engineer for Irrigation, I only suggested the procedure therein described as one that might be convenient. I do not think the half-yearly return to the Examiner would be absolutely necessary, and the Executive Engineer could keep himself informed in any way he liked as to the actual expenditure of material, with a view to sanctioning, or obtaining sanction for, further repair estimates for replenishing the reserve.

5. Para. 11 of note from the Chief Engineer for Irrigation has drawn my attention to an error in present procedure. All stores are indented as Provincial, and the Provincial suspense account is not relieved until the stores are actually received. There is no reason, however, why the Provincial account should not have been relieved on receipt of advice of payment in England; the convenience of indenting for all stores under one head could be retained without imposing any liability on Provincial funds; and this I propose to arrange. The actual liability now incurred is, however, very trifling.

Office note from the Chief Engineer for Irrigation, dated Madras, 29th October 1888, No. 231.

[Your office note 3828 C., dated 10th October 1888.]

I think that the Examiner's interpretation of the rules is correct, and it is not desirable to go up to the Government of India for an alteration of the rules. Under these circumstances the value of the reserve stock of stone required to be kept up at the several head works in the Tanjore and Negapatam divisions may be allowed to be debited to *Maintenance and Repairs*, as hitherto, instead of to stock as previously proposed, the Superintending Engineer being requested to see that proper arrangements are made for keeping a clear account of the materials, so that when used for any purpose the quantity so used may be at once replaced.

ORDER—dated 1st November 1888, No. 3461 W., Public Works.

Materials collected for specific works will be dealt with in the manner indicated by the Examiner, Public Works Accounts.

(True Extract.)

(Signed) H. R. MEAD, Colonel, R.E.,
Ag. Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.

" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

Exd. J. Henricus.
Spare Copies

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Govt. of {1888} Madras.
PUBLIC WORKS.

G.O., 1st Nov. 1888, No. 3461 W.

NOVEMBER.

Regarding the method of dealing with —
collected for specific works.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following paper

Encomendament of the Public Works Department dated 29th April 1889 to 1015 transferring letter from the Superintending Engineer, 4th Circle, dated 16th April 1889 no $\frac{172}{2W}$, submitting the result of his inspection of Light Houses for the past official year.

order. Dated 9th May 1889 no 192.

Recorded

(Lang extract)

WCB Budding Captains R.E.
under Secretary J.W.D.
for Chief Secretary.

To,
The Public Works Department.
—u— Presidency Port office.

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To

Proceedings, dated
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No. 100

9 May 1889

Subject

Recording Letter from
the Superintending Engineer
Fourth Circle, Submitting
the result of his inspec-
tion of Light-houses for
the past official year.

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S.E. IV Circle Φ
S.E. IV Circle η 15.78

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