(1) Number of pages 718

(2) Date of repair 15-6-86

(3) Initials of the Referencer G

MIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

DEPARTMEN

Prin.
Re

17-7-1987

Read the following papers :—

No. 30. From L. R. BURROWS, Esq., Acting President of the Municipal Commission, to Colonel W. T. F. FAREWELL, Officiating Under Secretary to Government, Public Works Department, dated Madras, 10th August 1876, G. No. 333.

In reply to your correspondence, No. 748-T. of 14th August 1876, I have the honor to inform you that Rupees 1,303-2-1 have been expended out of the grant of Rupees 3,300 for maintenance of roads over bridges and within Government compounds as per statement attached.

2. As it will be very inconvenient for the Municipality in the present embarrassed state of its finances to refund the balance in the current year, I have brought the matter to the notice of the Commissioners, and will report their views to the Government at an early date.

No. 31. From the same Officer, dated Madras, 8th September 1876, G. No. 382.

I have the honor to state that your letter, No. 748-T. of the 14th ultimo, was laid before a General Meeting of the Commissioners on the 31st idem, when the following Resolution was adopted :—

"The Commissioners observe that the Government grant for maintenance of roads over bridges and in Government compounds, amounts to Rs. 14,450 for the current year, a sum which is less by Rupees 10,647 than the amount sanctioned by Government for the same purpose in the preceding year; they also observe that the amount spent on, and appropriated for, the repair of Government roads in the current year is largely in excess of the Government grant; they would, therefore, respectfully submit that they cannot fairly be called upon to separate the roads over bridges and in Government compounds from other roads and to refund any portion of the balance referred to in the Officiating Under Secretary's letter."

2. This Resolution will be communicated to Government in the usual course with the Proceedings of the Meeting, but, in the meantime, I appeal for your information, a memorandum, of the sums paid and appropriated for the maintenance of Government roads; and another, of the estimates for roads over bridges and within Government compounds.

No. 31-A. From the same Officer, dated Madras, 12th September 1876, G. No. 385.

With reference to the Proceedings of Government noted in the margin, I have the honor to forward, herewith, a Budget Estimate of the charges of this department during the official year 1877-78.

Dated 18th April 1868, No. 208, Financial Department.

Government roads for the official year 1877-78.

E 7

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

4th February 1878, No. 582 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 30. From Major J. BEATTY, R.E., Officiating Superintending Engineer, Godavery District, to the Chief Engineer for Buildings and Roads, dated Camp at Dugdakvarum, 21st December 1877, No. 3,001.

As directed in G.O., No. 174, of 27th November 1878, I have the honor to submit herewith an estimate, amounting to Rupees 23,250, together with the survey plan of site and plan of buildings proposed for the new Court House at Rajahmundry, and to request that you will be so good as to obtain the sanction of Government; and if possible an allotment of funds in the Budget of 1878-79, as the old Court House is in a very

Plan also No. 34 W of 7th August 1875, No. 369 W of 9th October 1877, and No. 4,241 W of 21st November 1877.

decayed state, and some parts cannot now be used owing to their dangerous condition.

2. The site can now be had for Rupees 250, and as it is the best and only convenient one it ought to be secured at once. The present owner is anxious to part with it, as he proposes to dispose of it to other parties the next owner may demand a larger price. I therefore strongly recommend that permission be given to make the purchase now.

No. 30-A. From F. WHITE, Esq., Acting Registrar of the High Court of Judicature at Madras, to the Deputy Chief Engineer, Public Works Department, dated Madras, 24th January 1878, No. 107.

I have the honor to return duly countersigned the plan, estimates and specification of the new Court House proposed to be erected at Rajahmundry, forwarded to me with your letter No. 370, dated 21st instant, for that purpose.

No. 37. Order passed, 4th February 1878, No. 582 W.

The plan and estimate of Rupees 23,250 for constructing a new Court House at Rajahmundry are sanctioned.

2. It is not practicable to provide funds for the work in the outgoing Budget. But the District Engineer will secure the site, paying for it early in April next from the grant which will be at his disposal under Minor New Works, Civil Buildings, Provincial.

3. This section has been registered as Provincial No. 274 B of 1877-78.

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government P.W.D.

To the District Engineer, Godavery.
" Examiner of Public Works Accounts.
" Political Department.

Encl. S. T. Asstn.
Spare Copies

Govt. of (1878) Madras

PUBLIC WORKS.

PUBLIC

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

20th November 1879, No. 2,015 W.

Read the following papers :—

No. 42. From the Superintending Engineer, Fifth Circle, dated 14th October 1879, No. 967, M.D.

No. 43. From the same officer, dated 1st November 1879, No. 987, M.D.

No. 44. Orders passed, 20th November 1879, No. 2,015 W.

The plan and the estimate amounting to Rs. 10,000 for constructing a third-class Sub-Magistrate's Cutcherry and Subordinate Jail at the standard plan at Tiruvadanai are sanctioned for execution when funds are available.

(True Extract)

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

To the Superintending Engineer, Fifth Circle, with three spare
Executive of Public Works Accounts, and Abstract Estimate
" Judicial Department.

Ent. A. T. 1879
Spare Copies 4

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

10th August 1881, No. 1,951 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 43. From the Superintending Engineer, Third Circle, dated 20th July 1881, No. 694 T.J.

No. 43. Order thereon, 10th August 1881, No. 1,951 W.

The estimate amounting to Rs. 7,440, for constructing a Deputy Tahsildar's Cutchery, with out-houses, at Kodavasal in the Tanjore District is sanctioned for execution when funds are available.

2. This sanction has been registered as Provincial No. 58 W. of 1881-82 and classified as Civil Buildings, Original Works.

(True Extract.)

H. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Third Circle, with nine enclosures.
" Examiner of Public Works Accounts, with duplicate Abstract Estimate.
" Judicial Department.

Encl. 9 T. Accts.
Spare Copies

BUILDINGS AND ROADS
CIVIL WORKS

Govt. of (1881) Madras.

PUBLIC WORKS.

To

The Superintending Engineer,
Third Circle.

Dated

Read

Read

G.O. No. 2,305, dated 17th Line W

AUGUST.
Nos. 49 68.

Deputy Translator's Orderly with the Chief Draughtsman's Peon to take the letters with this to the Secretariat for submission to Government.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

17th September 1881, No. 2,305 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 129. From Surgeon-General W. R. CORNISH, F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Secretary to Government, Public Works Department, dated Ootacamund, 7th September 1881, No. 0-115.

With reference to G.O., No. 1,017, dated 27th July, in which Government decide that no portion of the General Hospital building in Madras, now in occupation as a European Regimental Hospital, can be given over for the better provision of hospital accommodation for the civil population of the town, I have the honor to request that the sanction of Government may be given to the preparation of plans and estimates for—

1st.—Provision of a Mortuary Theatre for the General Hospital.

2nd.—Provision of suitable buildings for the out-patient department of the General Hospital.

3rd.—Provision of an upper-storey over the centre wards of the present Women and Children's Hospital, Egmore, for the accommodation of European and East Indian females.

4th.—Improvement of the out-house accommodation in ditto.

5th.—The enclosure of the premises of the Women and Children's Hospital by suitable fencing.

2. I would venture to suggest that provision may be made in the Provincial Public Works Budget for the execution of, at any rate, a portion of the necessary works in the year 1882-83.

3. Letters on the subject of the hospital requirements are enclosed for information, and all necessary details will be furnished to the officer who may have to prepare plans and estimates, should Government be pleased to sanction their preparation.

Letter No. 1,241, dated 20th August 1881, from the Senior Medical Officer, General Hospital.

Do. No. 918, dated 21st August 1881, from Surgeon, Second Division.

No. 130. Ordered, 17th September 1881, No. 2,305 W.

The Superintendent of Works, Presidency, will frame the requisite plans and estimates in communication with the Surgeon General.

2. It seems questionable, however, whether much money should be spent on the old Lying-in Hospital. It does not follow that, because the military patients cannot be moved from the General Hospital, that the required additional accommodation for women and children cannot be provided there. If the old Lying-in Hospital buildings and site are not required for any other public purpose, their sale proceeds should go far to meet the cost of the new buildings at the General Hospital. The question should be considered and reported on in connection with the estimates now called for.

(True Extract.)

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

To the Superintendent of Works, Presidency, with three enclosures.

Public Department.

Ent. S. T. Asst.

Spare Copies

BUILDINGS AND ROADS
CIVIL WORKS.

Govt. of [1881] Madras.

PUBLIC WORKS.

SEPTEMBER.

Nos. 129-130.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

7th November 1881, No. 2744 W.

Buildings and Roads
Civil Works.

Read the following paper :—

No. 17. From the Superintending Engineer, First Circle, dated 20th October 1881, No. 1966.

No. 18. CHINGLEPUT, 7th November 1881, No. 2744 W.

The estimate amounting to Rs. 12,350 for constructing a first-class tank Chetty with cut-house at Pallavadu, in the Cuddapah Division, is sanctioned for execution when funds are available.

2. This sanction has been registered as Provincial No. 31 W. of 1881-82, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, First Circle, with three enclosures.
" Director of Public Works Accounts, with duplicate Abstract Estimate.
" Executive Engineer.
" Retained 1.

Rec'd 9 Nov.
Rep'd Copied

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

1st February 1882, No. 286 W.

Buildings and Roads
Civil Works

Read the following paper :—

No. 1. Report of the Committee appointed under G.O., 6th June 1881, No. 1488 W., to consider and report on the measures deemed necessary for the improvement of the Station of Ootacamund, and to frame an approximate estimate of the cost of the needful work.

No. 2. Order thereon, 1st February 1882, No. 286 W.

The attention of Government having been drawn to the requirements of Ootacamund, more especially from a sanitary aspect, the consideration of the whole question was by G.O., No. 1488 W., dated 6th June 1881, remitted to a Committee under the presidency of the Chief Engineer.

2. The Committee were engaged on the work from June to the end of October 1881, and having submitted their report recorded at the head of these Proceedings, the Right Honorable the Governor in Council desires that the thanks of Government be conveyed to them for their valuable and complete Report.

3. The proposals of the Committee embrace improved water-supply and drainage schemes, a new market and other town improvements, both sanitary and general, and are estimated to cost in the aggregate nearly 10 lakhs.

4. Of this sum it is suggested that 4 lakhs shall be advanced in the form of a loan to the Municipality, repayment being provided by increasing the present taxation from 7 to 12 per cent. on the rental of properties in the station, and that the balance of 6 lakhs be met by a grant to the Municipality from Imperial and Provincial Funds in equal shares. These grants would be spread over three or four years, as might be requisite for carrying out the works.

5. The Right Honorable the Governor in Council has given the Report of the Committee and the several suggestions contained therein his careful consideration, and after personal inspection of the localities named, by himself and by His Excellency the Commander-in-Chief, has come to the following conclusions.

6. Improved drainage and water-supply works are, in his opinion, most essential, but the former should take precedence of the latter in point of urgency. In this connection he deems it essential to note—

(1) that the Main Bazaar Kandal and other collection of native houses should be given a proper system of surface drains ;

(2) that the sewage from the bazaar should on no account be allowed to flow into and contaminate the lake as it does at present ; and,

(3) that the level of the lake should be lowered as suggested by the Committee. This latter measure can, he is convinced, be carried out without creating any perceptible nuisance, and should, when completed, reclaim nearly all the ground east of the Willow Bund, thus adding to the extent and sensibly improving the healthiness of the recreation ground.

7. If the lake level be lowered gradually the small portions of exposed margin would soon be covered by vegetation, and the natural action might be hastened by sowing rapidly-growing water weeds.

8. It may possibly be found desirable hereafter to supplement the evaporation of the lake to the *pandoots* depôt, but the scheme will be expensive, and will not provide for removal of liquid sewage. Meanwhile, it would appear clear that no nuisance will be created by adopting the plan proposed by the Committee for discharge of the latter into the stream below the land if, as may fairly be assumed, the tank waste weir or sluice can always furnish a sufficient body of water for flushing.

9. Among the detailed measures of conservancy requiring attention the following may be indicated :—

Where such accessories do not at present exist, owners of houses should at once be required to build latrines according to a plan approved by the Municipality, and of sufficient size to accommodate the number of servants on the premises, so also to provide receptacles which should be removed or emptied daily.

10. Pits for stable-litter which cannot readily be removed should be constructed, the contents of which should be either burnt periodically or used, under the sanction of the Municipality, in gardens or plantations where no contamination to the water-supply is likely to ensue.

11. The measures of sanitary improvement recommended by the Committee and others, which will readily suggest themselves to the Commissioner and the Health Officer of the station, should be kept constantly in view.

12. As regards the water-supply, considerable improvement in the existing state of things is also essential, mainly in the protection of the catchment areas, and in providing closed instead of open channels for conveyance to the points of final distribution.

13. While admitting the extreme difficulty of securing thoroughly satisfactory features to other alternatives to the natural springs are both too few in number and too uncertain as to their yield. It is all the more necessary, therefore, that the ground forming the catchment areas should be most scrupulously preserved from any possible pollution, and the water carefully conveyed to its destination. The several proposals made by the Committee with these objects appear to be well worthy of adoption.

14. The cost of the water-supply project is approximately estimated at Rs. 2,50,000, and the money would, in the opinion of His Excellency the Governor in Council, be well spent in providing the station with a plentiful supply of pure water if the precautions above advocated can be ensured.

15. The construction of the aqueduct proposed through the Snowdon Home property, for increasing the water-supply and the removal of the polluted drainage from the Tudor Hall estate, are both measures which commend themselves to Government.

16. The expense of distribution by pipes will be considerable, and will probably have to be met out, but may, nevertheless, come last in order of the proposed works should the grants prove insufficient to meet the whole charges at once.

17. An analysis should be made by the Chemical Examiner at Madras of all water now in use at Ootacamund, from tanks, wells, the lake and the various streams running through the station. Some of these sources of supply will, it is believed, be found quite unfit for use, and such measures as may be feasible should immediately be adopted as will effectually prevent the water being employed for drinking or cooking.

18. One source of contamination is due to clothes being allowed to wash clothes in the centre of the station and the water thus used flows into the lake. It is essential that this practice should be stopped without delay, and a place assigned

to these people at the lowest level of the station, where the water cannot possibly be used for drinking by the inhabitants.

19. As regards the minor improvements recommended by the Committee, the Right Honorable the Governor in Council concurs in the suggestions as to the removal of the slaughter houses and all other objectionable occupations, and trusts this subject, together with the other matters dealt with in the Committee's Report, to the early attention of the Municipal Commissioners.

20. He is, however, unable to give his full concurrence to the proposals on the subject of the work to be assigned to the Superintendent of the Botanical Gardens. His Excellency in Council has no doubt that Mr. Jamieson will help the society of Ootacamund in horticultural matters as far as may lie in his power, and trusts to his good sense to aid in the improvements indicated by the Committee as being allied to his own special occupation. If it were found feasible for the Municipality to engage the services of a really good landscape gardener, it is considered that the cost would be amply repaid by the enhanced value which would be thus given to property in the station.

21. While approving of the suggestions of the Committee as above specified, it remains to consider what portions of the scheme should be first taken up, and how the requisite funds should be provided.

22. His Excellency in Council has no doubt that the whole scheme of improvements is very desirable, and that the objects in view would be most economically attained by complete action at once, but he is not prepared to admit that the whole is of equal urgency; the Committee, however, propose that the grants, if made, should be spread over three or four years, and that period would, in the opinion of Government, be at least required for carrying out the works.

23. Taken in order of urgency, the Right Honorable the Governor in Council considers that the works stand as follows :—

(1)—*Drainage Works*—
- (*a*) Surface drainage of the bazaar.
- (*b*) Do. do. Kandal town.
- (*c*) Do. do. minor collection of houses.
- (*d*) Main sewer along north margin of lake.

(2)—*Water-supply Works*—
- (*a*) Improvements as recommended for both the Marleymund and Dodabetta reservoirs.
- (*b*) Distribution of supply by closed channels and pipes, do. northern area.
- (*c*) Do. do. do. southern area.
- (*d*) Do. "items" included under Remunerative "*urgently required improvements*," page 7 of Report, modified and if possible reduced.

(3)—The several items included under Remunerative "*urgently required improvements*," page 7 of Report, modified and if possible reduced.

(4)—Do. Unremunerative do.

24. The Inspector-General of Jails will be requested to state his opinion as to the desirability of employing convicts generally on the works of reclamation, &c., and especially with reference to the clearance of "wattle" scrub, paragraphs 36 to 42 of the Report. He should state what number of prisoners might be conveniently accommodated at Ootacamund, and what have been the general results of the clearance of "wattle" in the neighbourhood of the present jail, giving the cost per acre, &c.

25. In the opinion of the Right Honorable the Governor in Council an expenditure of 4 lakhs in the first instance would admit of material improvements being effected, and he is disposed to recommend that half of the amount as a grant-in-aid from Provincial Funds, and the remainder from Imperial, be granted and held available as the progress of the work may render necessary. With this view the Government of India will now be addressed.

26. For the remaining outlay the Municipality might be called on to work the charges, raising from time to time such small loans as may be needed. This can be done without any additional legislation.

27. Further orders will issue in the Financial Department as to the provision of funds as above alluded to, also regarding any change that may be desirable in the Municipal Act, as advised by the Committee, when the Government have been placed in possession of copies of the Acts relating to the Municipalities in all stations in Northern India.

(Here ends No. 207 W., dated 1st February 1905.)

(True Extract.)

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

To the Improvement Committee.
" Superintending Engineer, Fourth Circle.
" Financial Department.
" Publicist &c.

Printed at the [illegible]
Rajkot, Kathiawar.

BUILDINGS AND ROADS.
CIVIL WORKS.

Catl. of (1882) Madras

PUBLIC WORKS.

FEBRUARY.

Nos. 1-2.

HEY
13

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 237 W.

No. 1.

From

The SECRETARY to the GOVERNMENT of MADRAS,
Public Works Department.

To

The SECRETARY to the GOVERNMENT of INDIA,
Public Works Department.

SIR,—I am directed to submit, for the consideration of His Excellency the Governor-General in Council, the Proceedings of this Government, with the G.O., No. 200 W., *dated 1st February 1882.* *Report and plan (to be returned) noted in the margin, having reference to the improvements of Ootacamund.*

2. The *subject of improving the drainage, water-supply, &c., of this which by general assent is considered the most important sanitarium in India, has from time to time forced itself on the attention not only of this Government, but also of that of the Government of India, as will be observed from the correspondence closing with Colonel Dickens' letter, No. 792 C., dated 2nd November 1867.*

3. It is not now, I am to say, considered either desirable or necessary to enlarge on the claims which were so cogently urged by Lord Napier when Governor of this Presidency, and which from the correspondence quoted not, it will be observed, with so ready a response from the Supreme Government.

4. The Municipal Commission of Ootacamund, although charged with the creation of all the needful sanitary machinery, have hitherto found it impossible to enter upon the necessary works without imposing a burthen on the resident community which would be quite intolerable, while, on the other hand, the provincial resources at command of this Government have been inadequate for meeting any of the needful demands.

5. The Right Honorable the Governor in Council is of opinion that after years spent in fruitless reporting, the time for taking action has arrived, and on the eve of what he confidently believes will be an improved era as regards the provincial assignments for this Presidency, is very desirous of making a moderate grant-in-aid to the Municipality, stated in the Proceedings at 2 lakhs, and would now venture to solicit that a similar sum be contributed from Imperial Funds on the same account.

6. I am here to state that owing to a variety of circumstances unnecessary now to dwell on, the grant of Rs. 74,000 promised from Imperial towards the construction of the main sewer at Ootacamund in Colonel Dickens' letter, was never availed of by this Government; and looking to the large sums contributed by the Supreme Government towards similar ends elsewhere, the acknowledged requirements of Ootacamund,

and the position it occupies as a institution for all India, His Excellency in Council hopes that the request now put forward may not be looked on as in any sense unreasonable. The grant if sanctioned might be honoured in its incidence by being given in instalments of Rs. 50,000 per annum for the next four years.

I have the honor to be,

Sir,

Your most obedient servant,

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

Fort St. George,
1st February 1862.

14

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated February, 1st

Read

Read

1st February 1882, No. 107 W.

SECRETARY.
No. 3.

Forwarding Proceedings of Committee appointed to consider and report on the measures deemed necessary for the improvement of the Public Buildings,

1st April 1882, No. 880 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 11.

Read—the following letter from Major A. T. FRASER, R.E., Officiating Superintending Engineer, Fourth Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 15th March 1882, No. 405.

1 Abstract Estimate.
1 Specification.
1 Detailed Abstract.

I have the honor to forward for sanction a supplemental estimate, amounting to Rs. 2,000, for repairs to the District Munsif's Court at Mangalore.

2. This work was given on contract, and the accepted rates involved an excess of Rs. 2,000 which has been included in the supplemental estimate though it might be passed in account.

3. When the Executive Engineer was at Mangalore in March 1881 some items of work were considered required and ordered to be done. A supplemental estimate should then have been prepared, but there has been delay in its submission.

4. The first was of enamel earth and the principal item of extra work are laying pitch composition.

No. 12.

Order—dated 3rd April 1882, No. 886 W., Public Works.

The supplemental estimate, amounting to Rs. 2,000, for additions and improvements to the District Munsif's Court at Mangalore, is sanctioned.

* Vide G.O., No. 4202 W., dated 8th November 1879.

2. The total amount of the estimate* for this work will now stand at Rs. 7,200.

3. This sanction has been registered as Provincial No. 3 W. of 1882-83 and classified as Civil Buildings, Original Works. Provincial No. 127 B. of 1878-79 is cancelled.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle, with two enclosures.
" Examiner, Public Works Accounts, with duplicate Abstract Estimate.
" Judicial Department.

Encl. A. T. Fraser
Rpwn Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1882) Madras

PUBLIC WORKS.

APRIL.

Nos. 11-12.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 10.

Read the following letter from J. W. BUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer, Public Works Department, dated Masulipatam, 3rd March 1882, No. 2555 K.S.

I have the honor to forward herewith for your sanction an estimate, amounting to Rs. 6,560, for constructing Police lines for the guard of the Guntúr Jail, countersigned by the Inspector-General of Jails. The estimate includes a sum of Rs. 1,712 on account of prison labor, which it is intended to employ on the work.

1 Site Plan.
1 Plan of Huts.
1 Detailed Estimate.
1 Abstract Estimate in duplicate.
1 Specification.
1 Report.

No. 10-A.

Read the following letter from J. W. BUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer, Public Works Department, dated Bezwáda, 20th March 1882, No. 3623 K.S.

In reply to your No. 557 C. of the 17th instant, I have the honor to state that the site selected for the construction of the huts for the jail guard at Guntúr is Government ground, being a portion of the compound of the District Munsif's Court at that place.

2. The Munsif was asked, and stated that he has no objection to the erection of the huts as proposed.

3. I regret these facts were not embodied in the report.

No. 11.

Ordered—dated 12th April 1882, No. 909 W., Public Works.

The estimate amounting to Rs. 6,560, for constructing twenty Police huts for the guard of the Guntúr Jail, Kistna District, is sanctioned.

2. This sanction has been registered as Provincial No. 5 W. of 1882-83, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Second Circle, with six enclosures.
" Examiner, Public Works Accounts, with duplicate Abstract Estimate.
" Judicial Department.

R-4 5 7 Annas.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of [illegible] Madras.

PUBLIC WORKS.

APRIL.

Nos. 20-21.

17 245

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 20.

Read—the following papers:—

From the Inspector-General of Jails, dated 16th June 1881, No. 193.

No. 21-A.

Read—the following letter from Colonel T. E. TENNANT, Inspector-General of Jails, to the Secretary to Government, Public Works Department, dated Vizagapatam, 20th February 1882, No. 34:—

With reference to Judicial Proceedings of Government, dated 25th August 1880, No. 2004, and in continuation of my letter, No. 193, dated 16th June 1881, I have now the honor to submit, for the approval and sanction of Government, the accompanying plans and revised estimates for completing the new District Jail at Palamcottah.

2. As explained in previous correspondence the original plans for this jail were designed for keeping the convicts in association, but it was ultimately determined that the new prison should be constructed on the cellular system, and the present estimates now provide for constructing 350 separate cells instead of eight association wards, each ward to contain 50 prisoners.

3. The general arrangement and disposition of the blocks of cells have been determined in communication with the Superintending and Executive Engineers, and will be carried out without interfering with existing buildings. The blocks of cells diverge or radiate from a common centre, and are so arranged that the front of one block of cells looks on the back of the other, thus effectually preventing a convict seeing another fellow-prisoner in the opposite cell. Weather boards have been provided where required.

4. With regard to the construction and size of the cells much consideration has been given to the subject. The result has been that a cell 18½ × 7½ × 10, providing 135¼ square feet and 1,351¼ cubic feet for each prisoner, is considered sufficiently large for prisoners undergoing lengthened sentences of separate confinement without injury to health. Verandahs to the blocks of cells are not required. The open iron-grated doors of the pattern shown in the plan are placed rather to one side, so as not to subject the occupant of the cell to a draught or to rain that might be prejudicial to health. Iron-grated windows are provided in the back wall of each cell, and a small flat-bevel ventilator to close with a shutter from outside is provided for each cell; by this means active ventilation is secured and can be properly regulated. A basement of 2 feet has been allowed and the floors of the cells will be asphalted. In order to descend the separate, instead of providing stone steps for each cell, a platform along the front of the cells with a ramp from the outer edge will suffice. This will enable the prison officials to walk along the platform whilst visiting each cell without constantly ascending and descending steps before each cell door. The food, &c., will be

passed into the cells by means of iron trays of the same design and pattern as those used in the Penitentiary, which work satisfactorily.

5. The plans, as now revised, have been carefully prepared in consultation with the Superintending and Executive Engineers, and I beg the early sanction of Government may be accorded for proceeding with the work. Funds have been provided in the budget for this work. It is estimated that the value of convict labor will amount to Rs. 3,956.

6. I may mention that the buildings colored lake in the block plan have already been completed, so that if the blocks of cells are now sanctioned the jail ought to be completed in a few months.

List of Enclosures.

*22 Plans in book form sent by Bungly separately.
1 Tracing of book plan.
1 Detailed Estimate.
1 Abstract do.
1 General Abstract.
1 Item Estimate.
1 Specification.
1 Report of the Executive Engineer.
1 Letter from the Superintending Engineer, No. 717 T.E., dated 10th January 1882.
1 Revised Appendix drawn by the Superintending Engineer.

* Sent by Bungly.

No. 27-B.

READ—the following letter from Colonel T. E. TENNANT, Inspector-General of Jails, to the Secretary to Government, Public Works Department, dated Ootacamund, 20th April 1882, No. 66 :—

With reference to your letter, No. 33 E., dated 13th April 1882, I have the honor to refer you to the correspondence noted in the margin, from which you will perceive that the subject of the separate system has been a topic of serious discussion during the last few years. I need not go through the various arguments in favor of the cellular system; it will suffice to say that the conclusion arrived at is that the individual separation of one prisoner from another is the only basis on which any sound system of prison discipline can be formed.

2. If the cellular system was purely of an experimental character, I agree with you that it would be prudent to proceed with great caution, but we possess knowledge, and have had sufficient opportunity of judging of the suitability of the cellular system in this Presidency.

3. The cellular system has been in force for several years in the Penitentiary at Madras, and the results carefully watched not only by the prison officials but by Medical and Sanitary Officers, and experience has shown that the adoption of the

G.O., No. 1507, dated 25th July 1876.
G.O., " 1758, " 29th August 1876.
G.O., " 2079, " 18th November 1876.
G.O., " 1006, " 1st June 1881.
G.O., " 1045, " 19th May 1879.
Demi-official, Inspector-General of Jails, dated 19th August 1876.
Memorandum, Inspector-General of Jails, dated 1st September 1879.
Official Memorandum, No. 1277, dated 15th September 1879.
Inspector-General of Jails' letter, No. 221, dated 24th October 1879.
Official Memorandum, No. 1877, dated 31st December 1879.
Inspector-General of Jails' letter, No. 141, dated 8th August 1879.
G.O., No. 3096, dated 5th December 1879.
G.O., " 326, " 18th February 1881.
G.O., " 1158, " 5th August 1881.
G.O., " 301, " 16th February 1881.

cellular system is not only highly expedient for purposes of jail discipline, but is not objectionable on sanitary grounds.

4. To construct a portion of the new jail at Palamcottah on the cellular system, and keep the rest of the prisoners in association wards, would obviously leave the great evil of unrestricted social intercourse untouched. If the separate system is to be carried out, the separation should be complete, and I earnestly hope the Government will sanction the construction of this cellular prison as recommended by me. The subject has been under anxious consideration for years, and I am satisfied that the separate system of discipline will, by its own merits, eventually bear down all opposition; or at least, that the principle of separation will be recognized as the basis upon which all the discipline will be founded. Hence I think it would be a great mistake to continue to construct in new jails association wards, and so continue a system which we know to be wrong.

No. 27-C.

READ—the following letter from Colonel T. E. TENNANT, Inspector-General of Jails, to the Secretary to Government, Public Works Department, dated 25th April 1882, No. 331 :—

I have the honor to acknowledge the receipt of your letter, No. 33 E., dated 22nd April 1882.

2. As you will perceive from the documents alluded to in the first paragraph of my letter, No. 56, dated 20th instant, the size and construction of cells has been much consideration has been devoted, and as a large number of cells have been continuously occupied in the Penitentiary for the last four years, we have cellular experience as to the space and ventilation required; and, further, it has now been practically demonstrated that native prisoners can be kept continuously for eight months, without detriment to health, in cells constructed as those in the Madras Penitentiary.

3. The cellular space and proper ventilation requisite demand the most serious consideration, and I should not have presumed to have advised this large outlay for cellular accommodation had we not had practical experience to guide us.

4. The building of the Palamcottah Jail has been under discussion for years, and rather than run the risk of further opposition and delay I am quite willing to consent to your proposal to construct only four blocks out of the eight, and to allow these to be occupied for one year before commencing the construction of the remaining blocks.

5. In selecting the four blocks to be constructed I would choose every alternate block as shown on the plan.

6. As the average population of the jail is about 150, the rest of the prisoners who cannot be accommodated in the cells will have to remain in association in the present temporary wards.

No. 28.

ORDER—dated 3rd May 1882, No. 1123 W., Public Works.

The revised estimate, amounting to Rs. 2,08,603, for completing the new District Jail at Palamcottah, is sanctioned.

2. As suggested by the Inspector-General of Jails, only four of the radial blocks of buildings are to be constructed in the first instance, alternate blocks being left for the present. After these have been in occupation throughout a hot season, the result should be reported by the Inspector-General for the information and further orders of Government.

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2b7

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras.

PUBLIC WORKS.

Dated May, 3rd

Read

Read

G.O., 3rd May 1882, No. 1123 W.

MAY.

Nos. 27-28.

District Jail.

Revised estimate amounting to Rs. 2,50,000 for completing the same — sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Annual.

No. 26.

Read—the following G.O., dated 9th February 1882, No. 215, Financial.

Read—letter from the Accountant-General, Madras, dated 7th February 1882, No. 518.

Order—dated 9th February 1882, No. 215, Financial.

The statement furnished by the Accountant-General shows that the new Provincial scheme, applied to the budget estimate figures of 1882-83, will result in a Provincial deficit of Rs. 1,25,294. Setting, however, against this the anticipated Provincial balance (Rs. 3,74,606) at the close of the current year, there remains in hand a sum of Rs. 2,49,312, of which two lakhs will be added to the Public Works grant and the balance held in reserve. It is probable that the financial position will be somewhat improved when the Government of India consider the budget, as any reductions in the estimates of charges will result in placing a corresponding sum to the credit of this Government.

(True Extract.)

(Signed) R. DAVIDSON,
Chief Secretary.

To the Public Works Department.

No. 26-A.

Read—the following Official Memorandum from C. G. MASTER, Esq., Acting Chief Secretary to Government, dated 3rd May 1882, Miscellaneous No. 427, Financial :—

With reference to office note, No. 11 F., dated 14th April 1882, the Chief Engineer, Public Works Department, is informed that the two lakhs additional Provincial grant may be assigned to works as may be desired.

No. 11.

Order—dated 10th May 1882, No. 1190 W., Public Works.

The Government having had under consideration the demands against the Provincial Reserve of 1882-83 on account of Major Works, resolve to make the following appropriations of funds :—

Budget Item	Work.	Amount of Estimate.	Present Grant.	Additional Allotment now made.	Total.
	Class A Works—Budget of 1882-83.	Rs.	Rs.	Rs.	Rs.
2	Taluk Cutcherry at Wandiyur, North Arcot District	35,000	14,000	1,000	
10	Cutcherry at Manjakuppam for Collector of South Arcot	23,773	13,000	3,000	
13	Improvements to the Collector's Cutcherry at Bandiyatam, Kistna District	14,130	11,000	3,000	
15	Taluk Cutcherry at Dharmapuri, Salem District ...	17,450	11,000	3,000	
43	First-class Taluk Cutcherry at Pennadathe, Trichinopoly District	27,000	15,000	4,000	
	Preservation of Tirumal Naick's Palace, Madura District	1,82,853	15,000	10,000	35,000
	Class B Works—Budget of 1882-83.				
2	Taluk Cutcherry at Harpanahalli, Bellary District	26,715	...	20,000	
9	Third-class Taluk Cutcherry at Pantapatti, Godavari District	24,000	...	20,000	
19	Taluk Cutcherry at Pattukottai, Godavari District	7,300	...	7,300	
21	Deputy Tahsildar's Cutcherry at Gumtur, Salem District	7,000	...	7,000	
35	District Munsif's Court at Bhavani, Kistna District	8,000	...	8,000	
41	Alterations and improvements to the Sub-Magistrate's Cutcherry at Attur, Salem District ...	12,330	...	12,330	
54	Sub-Magistrate's Cutcherry at Virudupatti, Tinnevelly District	4,870	...	4,800	
	Executive Engineer's Office at Wallajah with accommodation for Overseers' Offices and Stores	7,300	...	7,300	
	Sub-Magistrate's Cutcherry and Sub-Jail at Pattukottai, Vasugopalam District*	7,600	...	7,600	97,830
	Grant-in-aid of Ootacamund Improvement Scheme ...		Rs.	Rs.	
	Do. of Wynaad Roads, &c., from Ootacamund to Gudalur		75,000		
			40,000		
					1,15,000

* Allotment will be made on receipt of reply from the Superintending Engineer to memorandum No. 408, dated 7th April 1882.

2. The additional appropriations now made for items 2, 3, 10, 13, and 15 of the Provincial Budget, Class A Works, provide either for the completion of the works or admit of the total expenditure in the year, amounting to Rs. 20,000, which may be assumed to be the maximum outlay on works of this character. Superintending Engineers will be expected to see that proper arrangements are made for utilizing the funds.

3. The budget appropriation of Rs. 15,000 for item 43, Tirumal Nayak's Palace, has now been increased by Rs. 10,000 to admit of certain additional work proposed by the Consulting Architect being proceeded with. Regarding this Mr. Chisholm will submit a special report accompanied by regular estimates.

4. The selection for assignments to Class B Works has been made generally in accordance with priority of sanction. It is considered desirable that those old

standing demands should first be cleared off. At the same time there are a few demands of more recent date which press for acceptance. Among these may be enlisted the requirements of the new Anantapur District on account of accommodation for establishments, proposals for which will be considered on submission in the regular way by the Superintending Engineer.

5. Substantial instalments of the grants-in-aid for the proposed Ootacamund Improvements and the Wynaad Roads are also provided for. The President of the Ootacamund Municipal Commission will be requested in the Financial Department to indicate the specific objects enumerated in G.O., No. 286 W., dated 1st February 1882, to which he would propose to devote the money. On these being considered and approved of further orders will issue as to the transfer of the sum of Rs. 75,000 now reserved.

6. As regards the grant for the road from Ootacamund to Gudalúr, it is observed from letter No. 1 of 17th March 1882 from the President of the Nilgiri Local Fund Board that towards the improvement of the road in question the following Local Funds are available for the current official year:—

	Rs.
Last year's balance	14,000
Current year's assignment	4,500
Total ...	18,500

If to this be added the proposed allotment of Rs. 40,000, there will be a round sum of Rs. 60,000, which, if judiciously expended, should result in a marked improvement and efficient working order, it can scarcely be doubted that the grant of Rs. 75,000 now proposed to be given should be spent through its agency, and a strong effort to accomplish this should be made by the Superintending Engineer, who will submit a very early report on the subject. Meanwhile the amount will be reserved for the object specified.

(True Extract.)

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

To Superintending Engineers,
" the Examiner of Public Works Accounts,
" the Financial Department.

Encl. A. F. Gudalúr.
Spare Copies

GENERAL
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Board Rec. 1110.

Read. *Desp.*

G.O., 10th May 1882, No. 1190 W.

MAY.

Nos. 70-71.

Funds.

Distribution of the Provincial Reserve of 1882-83 on account of Major Works.

1882
77

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General Account.

No. 70.

Read—the following G.O., dated 9th February 1882, No. 215, Financial.

Read—letter from the Accountant-General, Madras, dated 7th February 1882, No. 518.

Order—dated 9th February 1882, No. 215, Financial.

The statement furnished by the Accountant-General shows that the new Provincial scheme, applied to the budget estimate figures of 1882-83, will result in a Provincial balance (Rs. 3,74,606) at the close of the year, there remains in hand a sum of Rs. 2,49,212, of which two lakhs will be added to the Public Works grant and the balance held in reserve. It is probable that the financial position will be somewhat improved when the Government of India consider the budget, as any reductions in the estimates of charges will result in placing a corresponding sum to the credit of this Government.

(True Extract.)

(Signed) R. DAVIDSON,
Chief Secretary.

To the Public Works Department.

No. 70-A.

Read—the following Official Memorandum from C. G. MASTER, Esq., Acting Chief Secretary to Government, dated 3rd May 1882, Miscellaneous No. 427, Financial :—

With reference to office note, No. 11 E., dated 14th April 1882, the Chief Engineer, Public Works Department, is informed that the two lakhs additional Provincial grant may be assigned to works as may be desired.

No. 71.

Order—dated 10th May 1882, No. 1190 W., Public Works.

The Government having had under consideration the demands against the Provincial Reserve of 1882-83 on account of Major Works, resolve to make the following appropriations of funds :—

Budget Item	Work.	Amount of Estimate.	Grant from Imperial Funds.	Additional Appropriation from Local Funds.	Total.
		Rs.	Rs.	Rs.	Rs.
	Class A Works—Budget of 1892-93.				
2	Taluk Cutcherry at Wellington, Nilgiri Local Fund				
3	Cutchery at Manjakuppai for Collector of Nilgiri Local Fund	20,000	18,500	1,500	
10	Improvements to the Collector's Cutchery at Manjakuppai, Nilgiri District	10,775	10,000	1,000	
12	Taluk Cutchery at Dharmapuri, Salem District	14,130	13,000	1,000	
13	First-class Taluk Cutchery at Perambalur, Trichinopoly District	17,150	15,000	2,000	
21	Preservation of Dravidal Nadi's Palace, Madura District	37,000	34,000	3,000	
		1,98,955	90,500	10,500	10,500
	Class B Works—Budget of 1892-93.				
1	Taluk Cutchery at Shenyenkottai, Tinnevelly District				
2	Taluk Cutchery at Adoni, Bellary District	20,710		20,000	
9	Dindigul Taluk Cutchery at Periyapatti, Madura District	21,500		20,000	
10	Taluk Cutchery at Palamcottai, Tinnevelly District	7,500		7,500	
11	District Munsif's Court at Tiruppur, Coimbatore District	7,500		7,500	
12	Extending and improvements to the Sub-Magistrate's Cutchery at Allur, Trichinopoly District	5,000		5,000	
13	Sub-Magistrate's Cutchery at Kandapalli, Vizagapatam District	7,500		7,500	
14	Executive Engineer's Office at Madura with accommodation for Overseers' Office and Stores	7,500		7,500	
	Sub-Magistrate's Cutchery and Sub-Jail at Tiruvalur, Tanjore District*				87,075

* Estimates will be made in receipt of reply from the Superintending Engineer to memorandum No. 418, dated 27th April 1892.

	Rs.	Rs.
Grant-in-aid of Ootacamund Improvement Scheme ...	75,000	
Do. of Wynaad Road, viz., from Ootacamund to Gudalur	40,000	
		1,15,000

5. The additional appropriations now made for items 2, 3, 10, 12, and 13 of the Provincial Budget, Class A Works, provide either for the completion of the works or admit of the total expenditure in the year, amounting to Rs. 10,500, which may be assumed to be the maximum outlay on works of this character. Superintending Engineers will be expected to see that proper arrangements are made for utilising the funds.

7. The budget appropriation of Rs. 11,000 for item 21, Dravidal Nadi's Palace, has now been increased by Rs. 11,000 to admit of certain additional work proposed by the Consulting Architect being provided with. Regarding this Mr. Chisholm will submit a special report accompanied by regular estimates.

8. The selection for assignments in Class B Works has been made generally in accordance with priority of mention. It is considered desirable that [illegible]

standing demands should first be cleared off. At the same time there are a few demands of more recent date which press for acceptance. Among these may be included the requirements of the new Anantapur District on account of accommodation for establishments, proposals for which will be considered on submission in the regular way by the Superintending Engineer.

5. Substantial instalments of the grants-in-aid for the proposed Ootacamund Improvements and the Wynaad Roads are also provided for. The President of the Ootacamund Municipal Commission will be requested in the Financial Department to indicate the specific objects enumerated in G.O., No. 286 W., dated 1st February 1892, to which he would propose to devote the money. On these being considered and approved of further orders will issue as to the transfer of the sum of Rs. 75,000 now reserved.

6. As regards the grant for the road from Ootacamund to Gúdalúr, it is observed from letter No. 1 of 17th March 1892 from the President of the Nilgiri Local Fund Board that towards the improvement of the road in question the following Local Funds are available for the current official year:—

	Rs.
Last year's balance	14,000
Current year's assignment	4,500
Total ...	18,500

If to this be added the proposed allotment of Rs. 40,000, there will be a round sum of Rs. 60,000, which, if judiciously expended, should result in a marked improvement of one of the great lines of communication needed for the development of the planting and mining interests of the Wynaad. Were the departmental establishments in full and efficient working order, it can scarcely be doubted that the grant of Rs. 40,000 now proposed to be given should be spent through its agency, and a strong effort to accomplish this should be made by the Superintending Engineer, who will submit a very early report on the subject. Meanwhile the amount will be [illegible] object specified.

(True Extract.)

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

To Superintending Engineers,
" the Examiner of Public Works Accounts,
" the Financial Department.

Copy sent to the Govt

Esd. A. F. Gothell,
Supt. Copyist.

GENERAL
ACCOUNT.

Govt. of [1882] Madras.

PUBLIC WORKS.

Read this, 1882.

Read.

Read.

G.O. [illegible]
20th May 1882, No. 1190 W.

MAY.
Nos. 7071.

Funds.

Restoration of the Provincial Reserve of [illegible] on account of Major Works.

20th May 1882, No. 1190 W., Public Works.

24

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads
Civil Works

No. 132.

Read—the following letter from Colonel T. E. TENNANT, Inspector-General of Jails, to the Chief Engineer and Secretary to Government, Public Works Department, dated Madras, 14th January 1882, No. 14 :—

Letter from the Superintending Engineer, Sixth Circle, with 3 enclosures, dated 15th January 1882, No. 136.

1. The present accommodation for women in the Madura Jail is not satisfactory. The women are now placed in one of the padal blocks with only a wooden paling between their compartment and those occupied by the male prisoners. Moreover, we require more accommodation for male prisoners in order to prevent overcrowding, and the block occupied by the women must be devoted for male prisoners.

2. I propose to place all the women in a separate compartment situated in the north-west corner of the jail enclosure as shown in plan, sheet No. 1. Two wards are provided, one for convicted and the other for under-trial women. A small hospital ward and a bathing screened enclosure are provided.

3. The Palamcottah plans have been followed as closely as possible so far as the main details of the buildings. A separate workshop is not required for the women. Not 3 feet as at Palamcottah. A verandah about 9 feet wide, with a parapet wall in front 2 feet high, is added in front of the block, it will answer the purpose. The doors, I think, should not be less than 2 feet 9 inches; in the plans 2 feet openings are shown. Two feet iron grated doors are sufficient for cells, but a width of 2 feet 9 inches or 3 feet is required for wards to remove the conservancy tubs, &c. The fastenings to the doors ought to be stronger and well rivetted. These are, however, mere matters of detail which can be corrected by the Executive Engineer.

4. I consulted by overnight to mention to Colonel Beatty, the Superintending Engineer, that two solitary cells will be required in the women's compartment. These can be built on the same plan as at Palamcottah.

5. Funds have been provided for this work in the budget, and I beg you will obtain the early sanction of Government so that there may be no delay in commencing the work.

Enclosure.

From Colonel J. BEATTY, R.E., Superintending Engineer, Sixth Circle, to the Inspector-General of Jails, dated Trichinopoly, the 6th March 1882, No. 349 M.D.

I have the honor to send you herewith the plans and estimate for providing accommodation for female prisoners in the District Jail, Madura, which have been revised in accordance with the suggestions contained in your letter, No. 13, of 24th January 1882, addressed to the Secretary to Government, Public Works Department.

2. The revised estimates are as follow :—

	Rs.
Female ward	3,755
Hospital for females	2,933
Latrine and bath-room	840
Palisading	2,460
Palisading outlanding gates	118
Another pavement to wall	1,340
Ordinary cost	
Total ...	10,778

3. This estimate includes sanitary cells which were not provided in the original estimate, and the item of palisading has been reduced by substituting 1 inch diameter iron in the railing instead of 1 inch diameter. Doors entirely of iron bars also have been provided for the ward, &c. The parapet wall to verandah of female ward had been provided for in the first estimate.

4. The estimates are accompanied by the following plans :—

No. 1. Block plan of the compartment for females.
" 2. Plan of palisading.
" 3. Plan of ward, hospital latrine, and bath room.
" 4. Plan of sanitary cells.
" 5. Details of window and ventilator.
" 6. Details of door for hospital.
" 7. Details of iron gate for palisading.

P.S.—In amended design (double) two door ventilators have been substituted for the more expensive and ventilators.

The position of the building has been altered, the ward for females being brought a little further forward and the iron railing placed so as to enclose a larger space, the radius being now 40 feet instead of 30 as before. This adds slightly to the cost.

The total estimate is now Rs. 10,778 instead of Rs. 11,650.

No. 123.

Order—dated 25th May 1882, No. 1339 W., Public Works.

The estimate, amounting to Rs. 11,308, for providing accommodation for female prisoners and for a staircase and cut-stone flooring in the District Jail at Madura are sanctioned.

26

BUILDINGS AND ROADS,
CIVIL WORKS.

Calendar of [1882] Madras.

PUBLIC WORKS.

Record Rep. 1880.

Read. *Read.*

G.O. 29th May 1882, No. 1320 W.

MAY.

Nos. 132-133.

District Jail at Madura.

Providing accommodation for female prisoners and for a dispensary and out-door ward in the—— Sanctions estimate for ——

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

4th June 1881, No. 1,405 W.

Buildings and Roads,
Civil Works.

Read the following papers :—

No. 11. *Proceedings of the Government of Madras in the Financial Department, dated 17th May 1881, No. 874.*

The attention of the Right Honorable the Governor in Council has been very forcibly directed to the existing state of things in the Ootacamund station, more especially from a sanitary aspect, and with a view to very early improvement he desires that the President of the Municipality will, without delay, inspect the ground beyond Kandal carefully in order to determine, and to some extent lay out, the sites to which existing objectionable occupation of the station area may be transferred.

2. The Government further desire the President to impress on the Municipal Commissioners the very great importance which is attached to the improvement in every possible way of the sanitary condition and appearance of Ootacamund—a subject which strongly needs, and should receive, their early and careful consideration. It will be too late to apply a remedy when the station has acquired an unenviable notoriety as absolutely unhealthy.

(Signed) R. DAVIDSON,
Chief Secretary.

No. 11-A. *Endorsement of the Financial Department, dated 14th May 1881, No. 851.*

From N. A. BOUTELL, Esq., President, Ootacamund Municipality, to the Chief Secretary to Government, dated Ootacamund 20th April 1881, No. 58 (Carried No. 1,027).

I have the honor to submit herewith (for copy of letter No. 266, dated 25th March 1881, from the Ootacamund Municipal Engineer giving cover to the plans and estimates noted in the margin for the drainage of the Ootacamund main bazaar. Extract from minutes of a meeting of the Ootacamund Municipal Commissioners held on the 1st April 1881 is also enclosed.

Plan of Drain, three sheets.
Sections of Streets and Lanes, one sheet.
Plans of Drains, four sheets.
Estimates of Drains, four sheets.

2. The scheme forwarded by Major Morant has been supplemented by providing—

1st,—for the backyards of 500 houses at Rs. 15 each involving a charge of Rs. 7,500;

2nd,—for metalling the streets and lanes at a cost of Rs. 4,595.

These items are common to all the estimates.

3. There are further charges (omitted by Major Morant) for tools, plant, and sundries at 5 per cent. on the estimate, contingencies at 5 per cent., and temporary superintendence at 5 per cent.

4. The estimates range from Rs. 54,000 to Rs. 56,460. In spite of the large additional cost I would strongly recommend the adoption of No. 1 estimate, the construction therein provided being of a permanent character and, in the long run, far the most economical. Under this every portion of the drain is stone faced. No other material will in the same degree resist rain cut by mosquitos, and these may

eventually be used in spite of all orders to the contrary. Were the drains to be covered with india-rubber lemon mats to fit them, one of the cheapest estimates will suffice. But all, with the exception of No. 1, will suffer from lapse of time and other causes, and the cost of renewal will be heavy.

5. It would probably take two years to carry out No. 1 estimate, owing to the large amount of stonework.

6. It will be observed that the work has been divided into portions which can be taken up independently of each other.

7. The efficient working of the lesser drainage scheme must of course depend upon proper facilities for flushing the drains. To allow of such flushing, say once in twenty-four hours, a reservoir on the hill above the bazaar, containing say 1,000 to 1,500 gallons, will be necessary. This will form part of the improved water-supply scheme which will shortly be laid before Government for favorable consideration and should precede the main lesser drainage system now submitted for approval.

8. I would invite attention to the remarks at the close of the penultimate paragraph of Mr. J. O'Shaughnessy's letter, dated 15th February 1881, paragraph 21 (c). The effect of carrying into the lake, &c. I venture to doubt if this will be an unqualified improvement; I will go further and express my opinion that the collection of so much impurity, for every fruitful source of sickness and disease that the present surface drainage. In connection herewith I have the honor to enclose a memorandum by Surgeon-Major James Smith, one of the Medical Officers here and a Municipal Commissioner, showing clearly that in his opinion the scheme now under consideration stop short of what is really needed. Surgeon-Major L. C. Bonavy's letter (copy enclosed) No. 23, dated 14th instant, is to the same effect. In these views I concur, and regard a main sewer to carry off the drainage to the westward end of the lake as a necessary part of any scheme having for its object improved sanitation. If these suggestions are approved, the construction of the main drain should take place at least concurrently with, and might precede, the main lesser drainage.

From J. O'SHAUGHNESSY, Esq., C.E., Local Fund Engineer of the Nilgiris, to the President, Local Fund Branch, Nilgiris, dated Ootacamund, 15th March 1881, No. 264.

I have the honor to submit herewith the plans and estimates noted in the margin for the drainage of the Ootacamund bazaar.

The history of the several schemes and proposals regarding this work that have been made during the past fifteen years or more is well known, that beyond sanctioning it with a view of utilizing water definite action in regard to it was, there was no necessity to describe its very unsatisfactory result at the time.

There have been three distinct schemes prepared for this work:—

1st.—Major Pollock's scheme, which would probably cost lakhs of rupees;

2nd.—Major Farewell's scheme, if it can be called a scheme, prepared to suit the Municipal fund;

3rd.—Major Mowatt's scheme, intended to improve and complete Major Farewell's scheme when sufficient funds are available.

Major Pollock's scheme was put aside by the time of being too expensive.

Major Farewell's scheme was partly carried out, to the extent of a cost of about Rs. 8,000, and Municipal Commissioners about that period.

The estimates now submitted are based on Major Mowatt's scheme of 1878 modified chiefly in regard to the lake. After personally investigating the matter on the spot, and carefully considering the recommendations contained in Major Mowatt's estimate, and the working of the Municipal Commissioners in Major Mowatt's estimate, and the working of the Municipal Commissioners in Major Mowatt's estimate, and the working of the Municipal Commissioners

No. 14. Order thereon, 6th June 1881, No. 1,408 W.

The Honorable the Governor in Council is satisfied that of the schemes submitted for improving the minor drains of the Ootacamund bazaar, No. 1 amounting to Rs. 86,240 holds out the best prospects of success, but he cannot disguise from himself that taken by itself this project is merely a palliative, and that in order to effect in any adequate manner the improvements so essential to the health of this important sanitarium, it must form portion of, and be preceded by, a sufficiently comprehensive water-supply and drainage scheme with the other requirements upon which so much stress has rightly been laid by the President of the Municipality and the Medical Officers.

2. In order that the Government may be placed in a position to form an opinion both with reference to the character of the measures so urgently needed and the approximate cost of the same, the papers and plans will now be considered and reported on in the light of the above remarks by a Committee composed as follows under the presidency of the Chief Engineer, viz.—

Mr. N. A. Roffell, President, Municipal Commission and Commissioner of the Nilgiris.
Major-General H. Morgan.
Major-General Baker.
Lieutenant-Colonel J. O. Hastie, R.E., Acting Chief Engineer for Irrigation and Joint Secretary to Government.
Deputy Surgeon-General M. C. Furrell, Sanitary Commissioner to Government.
Major H. R. Mead, R.E., Superintending Engineer, Second Circle.
Surgeon-Major L. C. Nanney.
Surgeon-Major J. Smith.
Mr. G. T. Walch, M.C.S., Executive Engineer, Godavari.
Mr. J. O'Shaughnessy, Executive Engineer to the Municipality and Local Fund Board.
Mr. W. E. Subbiah, Vice-President, Ootacamund Municipality.
Mr. J. Minchin.

(True Extract.)

Colonel, R.E.,
Secy. to Govt., P.W.D.

To the Chief Engineer, Public Works Department, with enclosure.
" Major-General H. Morgan.
" Major-General Baker.
" Lieutenant-Colonel J. O. Hastie, R.E.
" Deputy Surgeon-General M. C. Furrell.
" Major H. R. Mead, R.E.
" Surgeon-Major L. C. Nanney.
" J. Smith, M.I.C.E.
" G. T. Walch, Esq.
" [illegible], Esq.
" W. E. Subbiah, Esq.
" J. Minchin, Esq.
" the Financial Department.

Ref. E. C. Stubbs.
Spare Copies

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads
Civil Works.

No. 45.

READ—the following Memorandum by Colonel R. H. SANKEY, C.B., R.E., Chief Engineer, Public Works Department, dated 23rd January 1882:—

Having had the honor of accompanying His Excellency the Governor in his late tour through the Wynaad, it is necessary that I should state briefly the arrangements, which it seems necessary to adopt in regard to the trunk roads of that tract of country, to which so much attention has lately been drawn.

The facts brought under the immediate notice of His Excellency either by personal experience or by the information submitted in the addresses of the various influential bodies, and otherwise, have dissipated any doubt which might previously have existed as to the adequacy of the present communications for meeting in any proper sense the present needs of the Wynaad.

2. Suffice it to say that with the exception of the Támrachéri Ghát (an admirable work so far as it goes and about half completed as a trunk line) the roet are only fair-weather lines, most fairly traced, others indifferently so, and all insufficiently opened or formed, and as a rule quite unmetalled.

3. The papers printed with G.O., 14th November 1881, No. 2821 W., and particularly Major Reid's letter of the 10th July, define very clearly the limits of desirable action on the part of Government, the late discovery of auriferous reefs in South Wynaad pointing to the necessity for linking that portion of the country with the general system of Provincial roads, which as proposed by that officer would stand as follows:—

(1.) The road from Calicut to Vayitri by the Támrachéri Ghát.
(2.) Do. from Vayitri by Gúdalúr Ghát to Gotacamund.
(3.) Do. from the bifurcation about 4 miles out of Vayitri to Sultan's Battery.
(4.) Do. from Vayitri to Manantoddy.

4. The further examination of most of these lines has practically suggested little change in the scheme as a whole, though, for the sake of convenience, I shall in the following remarks adopt a somewhat altered classification, based on the requirements as far as ascertained of each portion :—

(1.) *Calicut to Malayaram.*—The main line now used, by Puddanellum as far as Támrachéri, though in its early portion with a hard gravel (laterite) surface, has uneconomically bad gradients; owing to the latter defect traffic it is understood even now seeks the somewhat circuitous though flatter road *viâ* Challaye to Támrachéri, and it will clearly be desirable to have the merits of both lines carefully investigated. I am not by any means satisfied that such an investigation, owing to the very small lengths required and the ease with which bad gradients can be flattened, may not show that the ground road can be dealt with more economically than the other; but, whichever line may be finally accepted, I would, generally speaking, assume there will on the whole be some 30 miles to deal with at an average outlay of Rs. 5,000 per mile.

(2.) *Malayaram to Vayitri.*—Practically this is the Támrachéri Ghát, 13 miles. Some widening and flattening of gradients required throughout with remetalling of the whole surface 6 inches in consolidated depth, say at Rs. 6,000 per mile.

Through line.	Rates as above.	Miles.	Rate.	Total.	Grand Total.
		Rs.	Rs.	Rs.	Rs.
Vayitri viâ Pollisi's Factory to Mysore Frontier	(1.) From 4 miles northeast of Vayitri to Mooyeburra.	10	6,500	65,000	
	(2.) Mooyeburra to viâ Pollisi's Factory to Mysore Frontier	20	5,500	1,10,000	1,75,000
Vayitri to Mooreally	(3.)	25	5,000	1,50,000	1,50,000
	Total ...	...	...	...	10,16,000

Say ten lakhs.

5. The approximate sums given above would provide for fully formed and metalled roads. Excepting on the ghâts and near Calicut where laterite is readily procured, metal is extremely scarce and gravel it is to be feared absolutely unprocurable. Quarries for the former will have to be established, and considerable expense in carriage incurred.

6. As regards the bridges, the present wooden ones though apparently flimsy are generally quite able to bear weights of 1½ tons per wheel. Some will probably have to be removed at once and others replaced, from the subsequent maintenance allowances, as weakness shows itself.

7. The rates I have given would in all probability allow of half or one-third of the said wooden bridges being replaced by iron plate girders in cases of small spans, and Warren girders for 50 or 60 feet spans.

8. To the cost of the works as above roughly estimated, must be added that of the pay and shelter of the requisite establishment.

9. Probably five years would be needed for projection, estimation and execution of the works, and as not less than one Executive Engineer, three Assistants, ten Upper Subordinates, and an adequate Medical Staff would be needed, considering the unhealthiness of the country throughout much of the working season, the cost (taking into account special Wynaad allowances to which all the members of the department there employed would be entitled) cannot, I fear, fall short of 30 per cent. of the expenditure on the works.

10. The provision of proper shelter for the establishment is also an indispensable necessity, for preservation of health not only as regards the European officers and subordinates, but for the fixed establishment of coolies and mates, which must be maintained for carrying out promptly monsoon repairs of all finished portions.

11. In this view I should estimate approximately that the following provision would be made, viz.:—

	Rs.
Executive Engineer's office and house probably at Vayitri ...	15,000
Five inferior bungalows at various points about 30 miles apart at 6,000 rupees each	30,000
Twelve houses for Upper Subordinates 10 to 15 miles apart at 2,000 rupees each	24,000
Two houses for Hospital Assistants do.	4,000
Twenty-four mely lines (for a mate and ten coolies each) at from 5 to 7½ miles apart at 1,000 rupees	24,000
Total ...	1,97,000

12. Tools and plant may be taken at the usual amount, viz., 2½ per cent. on cost of works.

13. It must further be borne in mind that, no matter how any portion of road has been finished that portion must be made the proper maintenance.

14. When the whole 113 miles have been completed the following scale for maintenance may suffice :—

	Rs.
30 miles of road in Wynaad at Rs. 100 per mile	3,000
23 miles Uncleared and Unmetalled roads at Rs. 400 per mile	9,200
110 miles in Wynaad and Ghâts at Rs. 500 per mile	55,000
Total per annum ...	67,200

15. Taking into account the comparatively small proportion of this ultimate amount, which will be required during the first few years, it will suffice to allow as all road charges of 1½ lakhs per annum, or 75,000 rupees for maintenance during this period. To this should be added Rs. 25,000 for repairs of houses and offices, making a total for repairs of all classes of 1 lakh.

16. The remaining configuration will consist chiefly of compensation for land taken up for also the buildings for quarries for stone, metal or gravel; for bridges; for widening portions of old and forming new roads, &c. Notwithstanding the strongly expressed desire on the part of owners of estates to meet the Government in the most liberal spirit in regard to this question, demands of this character must be expected and will have to be provided for; but it would be impracticable here to attempt any detailed calculation for the probable cost. There can be little doubt that in the aggregate the charge must be considerable, and it would therefore be well to put down 1 lakh on this account.

17. The cost of the scheme may be summed up as follows :—

Original—	Works.	Rs.	Rs.
(a.) Reformation or completion of road ...		22,500	
(b.) Buildings ...		5,00,000	
(c.) Bridges ...		5,00,000	
Repairs—			
To roads and buildings ...		1,00,000	
			11,27,500
(Calculated at 10 per cent.)	Revenue charges. Land Value ...		1,00,000
(Calculated at 2½ per cent.)	Power and Plant. ...		6,62,500
			25,000
	Grand Total ...		19,15,000

Say in round numbers 19½ Lakhs.

18. With exceptional energy and few errors to contract the scheme might no doubt be worked out in less than the five years assumed, but in that case estimated rates, which would neither exist themselves nor those interested in guiding or using, would certainly have to be resorted to. As matters stand, if the construction of the railway be decided on at an early date, this result will, it is feared, be unavoidable, and must add to the outlay.

19. Assuming that 19½ lakhs will suffice, and that the establishment can be set to work in next October, the following provision of funds would in all probability have to be arranged for :—

	Rs.
1881-82 (Half-year) ...	25,000
1882-83 ...	2,00,000
1883-84 ...	4,00,000
1884-85 ...	4,00,000
1885-86 ...	4,00,000
1886-87 ...	4,00,000
1887-88 (Half-year) ...	2,00,000
Total ...	19,25,000

20. For administrative purposes it will be necessary to form the whole into a separate charge (under the Superintending Engineer, Fourth Circle,) which might be designated the "*Wynaad Road Division.*"

21. The present arrangements for maintaining the existing roads through the agency of the Local Fund Engineer need not necessarily be disturbed, till such time as the establishment of the new Public Works Division, is in a position to take over the work of complete reconstruction in any particular portion, and the grants-in-aid as now given by Government might with slight modification continue till completion of the scheme, when the arrangements would no doubt call for reconsideration.

22. The chief difficulty in initiating a scheme of the character proposed will be found in securing efficient establishment, the present Public Works Department having more work on hand than it can satisfactorily supervise, and having moreover but few members specially qualified for the work. I am now, however, engaged in making the needful inquiries regarding the establishment, and in the meanwhile the general character of the scheme as above sketched, and the incidence of the charge may, if thought desirable, be considered by Government.

23. On the accompanying map the proposed roads are shown in green.

READ—the following G.O., dated 1st April 1882, No. 319, Financial.

Read—again the following G.O., dated 27th June 1881, No. 1192, Revenue :—

Order—dated 27th June 1881, No. 1192, Revenue.

The Board of Revenue will call upon the Local Fund Boards concerned to make a special report upon the state of the communications referred to in the memorial, which they will then forward to Government with such remarks and suggestions as the circumstances of the districts concerned may seem to demand.

(Signed) C. G. MASTER,
Acting Chief Secretary.

Read—the following Proceedings of the Board of Revenue, dated 23rd January 1882, No. 202 :—

Read—the following letter from G. McWATTERS, Esq., President of the Local Fund Boards, Malabar District, to the Secretary to the Board of Revenue, dated Calicut, 21st December 1881, No. 1013 :—

With reference to the Proceedings of the Board of Revenue, dated 4th August 1881, No. 1594, communicating G.O., dated 27th June 1881, No. 1192, I have the honor to forward the Local Fund Engineer's detailed reports on the state of the communication leading from the Coast to South and South-east Wynaad.

No. I is the Local Fund Engineer's inspection report on the present state of these roads.

No. II comprises his remarks on the relative advantages of the Karkur and Tâmarâssi routes compared with the cost of a 2 feet 6 inches railway.

No. III is an estimate for putting the Karkur road in order for fair-weather traffic and for loads not exceeding 5 tons. The total amount is Rs. 18,640.

No. IV is an estimate for bridging and making the Karkur road a first-class communication in all weathers. The total is Rs. 4,74,820.

No. V comprises three estimates for similarly making the roads from Calicut to Lackadi, Lackadi to Manantoddy, and Lackadi to Choladi, being our limits on the line to Devâla. The total is Rs. 6,49,860. From Choladi to Devâla in South-east Wynaad would probably cost another lakh.

11. At paragraphs 23 to 26 of his report the Engineer makes some forcible remarks regarding the manner in which gold-mining machinery is shipped, and offers suggestions for facilitating its transport over the roads.

12. The President has not examined these proposals in detail, nor does he make any observations regarding the cost of any of the works. Presumably he looks upon them all as quite beyond the financial power of the Local Fund Board to carry out and intentionally omits all reference to the subject, regarding discussion as mere waste of time. Whether or not he is justified in thus treating a matter upon which he was called upon to report specially, it is necessary for the Board, in forwarding his letter and its enclosures, to comply with the instructions of Government and to offer "such remarks and suggestions as the circumstances of the districts concerned may seem to demand."

13. The total annual revenue of the Malabar Circle amounts to about Rs. 3,80,000. The following statement gives the details for 1890-91 :—

	Road Fund	General Fund	Total
	Rs. 46,272	Rs. 22,029	Rs. 68,301
Balance	1,45,776	72,888	2,18,664
Land Cess	73,992	...	73,992
Tolls	69,793	15,068	85,861
Other Receipts	...	...	...
Total Receipts ...	2,83,561	88,956	3,80,517
Total including Balance ...	3,29,833	1,10,985	4,40,818

14. It is of course possible for the Local Fund Board, by starving other works, to provide the Rs. 18,619 required to carry out the repairs to the Karkur Ghât Road necessary to render it useful for light traffic in fair weather, but this would by no means satisfy the Mining Companies. The other works proposed, even if it were admitted that they form a fair charge upon the Local Funds, would have to be carried out on loan. Supposing the Tirurangâdi line to be adopted, the amount needed (Rs. 6½ lakhs) would, at 5 per cent., cost the Local Fund Rs. 32,500, of which a small part, say a quarter, or Rs. 8,000, might be recouped from tolls on the road, and the balance would be a permanent charge on the funds of the Circle.

15. Interest on the capital (Rs. 3½ lakhs) required for the railway would, at 5 per cent., amount to Rs. 1,62,500. Nothing is said in the papers before the Board about probable receipts, and without data it is impossible to form any idea of the amount of traffic which might be expected. This, however, is certain, that, whether the Mining Companies succeed or not, the industry on which they are engaged is not of a character likely to supply a very large quantity of traffic after machinery has been got into position. If a dividend is to be looked for, it must be exported from the planters of the Wynaad rather than the miners.

16. Here the question arises whether, in the event of the proposal to construct a railway from above the ghâts to the coast being favorably received, the line now proposed is, in view of all requirements to be met, the most suitable which can be selected. The Gold-mining Companies not unnaturally think that their interests are paramount, but, however successful their enterprise may prove, it will be many years before it becomes an established industry such as it now is in the older parts of the Australian Colonies, and such as coffee planting and curing has long been above the Western Ghâts. In present circumstances it will probably not be disputed that coffee as compared with gold is entitled to the higher consideration, and consequently the terminus of the railway on the coast should be fixed according to the requirements of the planters rather than those of the miners.

ENCLOSURE No. 1.

From J. O'SHAUGHNESSY, Esq., C.E., Local Fund Engineer, Nilgiri District, to the President of the Local Fund Board, Nilgiris, dated 17th January 1862, No. 47.

In submission to your endorsement on Proceedings of the Board of Revenue, dated 4th August 1862, No. 1014, calling for a report on the state of certain roads leading to the Gold Mines in the Wynaad, I have the honor to state that there has been no impediment to the transport of gold-mining machinery over the roads of this district.

2. The main line of communication in this district which connects the Coast with the Gold Mines in Wynaad is, I need scarcely say, the road from Mettupálaiyam *viâ* Coonoor, Ootacamund, Gúdalúr, Nadgani, Devála, Pandalúr, and on to the limits of the district near Nalleatam, Gúdalúr, Nadgani, Devála, Pandalúr, and on to the limits of the district near Chemmánkóli.

3. The road is divided into six sections as follows :—

	MILES.
1st.—Mettupálaiyam to Coonoor	30
2nd.—Coonoor to Ootacamund	12
3rd.—Ootacamund to Nadavattah	21
4th.—Nadavattam to Gúdalúr	10
5th.—Gúdalúr to the Devála Road, near Nadgani, 8 miles, and thence to the 17th mile on Karkur Ghat, 3 miles	11
6th.—Nadgani to Chokali Bridge near Chemmánkóli	21
Total ...	95

4. Sections 1 and 2 from Mettupálaiyam *viâ* Coonoor to Ootacamund is thoroughly completed and is perhaps one of the finest ghát roads in the world. The bridges are however all of timber, and it is impossible to say where a beam, a bolt, or a plank may give way, and this, at a time when a heavy load may be passing over a bridge, would endanger the whole structure, but for all practical purposes these two sections of the road may be considered always open to traffic for all practical purposes these two sections of the road may be considered always open to traffic of any weight that can possibly be carried upon it.

5. Section 3 from Ootacamund to Nadavattam, 21 miles, was formed to widths of from 9 to 20 and open to cart-traffic in 1859; it passes for nearly its whole length through dry downy soil and has never been finished; it is a fair-enough road for ordinary traffic in dry weather, but, though carts have struggled along it even in wet weather, it cannot be considered a cart-road in the rainy season of the year.

6. The rough estimate of [illegible] this road amounted to Rs. 84,000 as reported on the 16th October 1856. The estimate for thoroughly completing the road to a width of 18' throughout, 12' of which to be metalled with a depth of 6" of broken stone and 12" of gravel, with bridges, culverts, side and catch drains, stone and earthen parapets, has now been framed, and it amounts to 1,50,000 rupees, or an average of about 4,000 rupees per mile. Considering that a cubic yard of broken stone including quarrying, breaking, carting, spreading, and rolling costs 1½ rupee and that the cost of the other portions of the work is proportionally high, the work cannot possibly be done in a proper and efficient manner for less than this amount.

7. By Government Order in the Public Works Department, No. 269, dated 21st February 1861, Rs. 10,000 for 1860-61 and Rs. 10,000 for 1861-62 were allotted from Provincial Funds for the improvement of this road, and a further sum of 30,000 rupees from Chinchona revenue was at the same time promised for this purpose. Arrangements were at once made for the execution of the most necessary portions of the work up to this amount of 50,000 rupees. The Provincial grants have been expended, but there appears to be some delay in allotting the 30,000 rupees promised from Chinchona revenue, and I have heard, though I have received no official intimation on the subject, that the Government of India have refused to sanction this grant. The Government of Madras will, no doubt, provide funds from some source to enable this Board to meet the engagements made on the promise of a grant of 50,000 rupees, and the stoppage of the work would now then be disastrous, as tools, cattle, and labor sufficient to complete the whole road before the end of 1862-63 have been collected at great expense and trouble, and the disposal of the tools and cattle and the dispersion of the labor would entail serious loss and delay.

8. Section 4, from Nadavattam to Gúdalúr (the Gúdalúr Ghat), was begun in 1855 and was open to cart-traffic in the year 1870. This road also has not been fully completed, but it passes through good road-making soil, and, though rough and uneven in many places, it is a sound still fair road, and it is practicable for common carts with any possible load throughout the year.

9. Section 5, the road from Gúdalúr to Nadgani, 8 miles, and the portion of the Karkur Ghat in this district, beyond Nadgani, 3 miles,—total 11 miles—was made by me in 1865; all the culverts except two are of masonry abutments and arches. The only large bridge, the Sangatty, which is 30' span, is a wooden girder able to carry any weight that could be put on it; this was completed by the late Captain Cuningham, R.E., in 1866. This road has been partly

Nadugani to Chatanbidi is excessive. That estimate was for merely metalling and improving the present track, and I doubt if it would be sufficient for even this purpose. A mile of finished road cannot be made, according to the standard specifications of the Public Works Department, in any part of this district for less than from Rs. 10,000 to Rs. 15,000 according to its class. The road from Tippenadu to Nadugani cost, I think, Rs. 12,500 per mile. The Karkur Ghát cost Rs. 20,000 per mile, and the Thurnaikhi Ghát cost, I believe, Rs. 30,000 per mile.

17. The earliest formation of a mile of road in easy soil will cost at least ... ... Rs. 1,500 A. 0 P. 0 per mile.
Culverts and bridges at least ... ... 1,500 0 0 „
Metalling at 1,450 cubic yards at Re. 1 ... ... 7,250 0 0 „
10,250 0 0 „
Add for supervision and sundries at 25 per cent. ... 2,562 8 0 „
Total ... 12,812 8 0 „

and this estimate makes no allowance for rock, which is almost invariably met within the formation of a long line of road.

18. I do not suppose that His Excellency the Governor is at all likely to accept off-hand the impossible, and on this subject the ignorant opinions of the Secretary to the Nilgiri Planters' Association, but it is as well that His Excellency should be informed of the exact state of the case as soon as possible.

Resolution—dated 27th January 1882, No. 277.

Submitted to Government in continuation of Board's Proceedings, dated 23rd January 1882, No. 202.

2. It appears that the Local Fund Engineer estimates that the sum of five lakhs of rupees would be necessary for the purpose of putting into order all the roads in the Nilgiri District which are used by [illegible]

(True Copies and Extract.)

(Signed) F. GIBSON,
Acting Sub-Secretary.

To the Chief Secretary to Government, Financial Department.
Copy to the President, Local Fund Board, Nilgiris.
" " " Malabar.

Order—dated 1st April 1882, No. 319, Financial.

Communicated to the Public Works Department for consideration in connection with the schemes now being dealt with for connecting the gold fields with Ootacamund and for constructing a railway from Beypore to Gúdalúr with extension to Mysore.

(True Extract.)

(Signed) J. D. REES,
for Acting Chief Secretary.

To the Public Works Department, with enclosures.
" Board of Revenue.

ENCLOSURE.

From G. ANDERSON, Esq., District Engineer, Malabar Local Fund Department, to the President, Local Fund Board, Malabar, dated Calicut, 17th December 1881.

In accordance with your instructions appended to Board of Revenue's Proceedings, No. 1594, of 8th August last, I have the honour to report that a careful and detailed inspection has been made by me of the present direct road from Calicut to South-East Wynaad *viâ* Manjeri and Kavilé Ghát, as also the section of Road No. 5, Kondótti to Edavannah *viâ* Areakode, which is a portion of the direct road project, but this is now closed to through traffic, owing to a land slip on the Kollengalore river railway between Kondótti and Edavannah.

2. The route from Calicut to Nadugani *viâ* Manjeri is 69 miles against 66 *viâ* Areakode.

3. The surface of the road on the first 10 miles from Calicut is in good condition throughout; it has a good cross section, is well drained, and has a covering of broken laterite stone

I think that it capable of carrying the present heavy traffic during fair weather, but should the rains become frequent throughout the whole year and during heavy showers whether the road will bear certainly be cut up and suffer severely.

4. From the 6th to 63rd mile the road surface is in very bad condition, and after a shower of rain becomes heavy and trying to all classes of wheeled and pack traffic. There is no covering material proper throughout the whole of the last 14 miles. This portion of road are, never finished, only widened out, metalled and side drained, and from time to time since opening for traffic, boulders, pebbles, broken stone and gravel have been thrown down indiscriminately in pockets, or the portions that suffered most, during heavy rains or the beginning of the rains. In most places the surface has consolidated in getting a certain firmness, but the result has not been satisfactory, the raising to the required working condition of the materials employed in breaking and giving a temporary covering to the road surface is a nuisance and evil, and in many places it is doubtful with large stone 8 inches to 9 and 9 inches in diameter standing about 2 to 3 inches above the road surface in a manner that is very trying to both up and down traffic.

5. Repairs are now being carried out at the worst places and the large stones are being removed and broken up into 2½ inches cubes and spalls rolled.

6. The gradients throughout the whole length of road between Calicut and Nilgiri boundary are over the worst of their kind for the passage of heavy traffic with exception of the short length between 27-6 and 28-6.

7. The road surface has an average width of 20 feet throughout on banks through paddy fields 12 feet and on side cutting 16 feet clear width which is sufficient for the present traffic. The only alteration that is now needed is the widening of a few narrow portions—under 12 feet in paragraph 11, we have up to-day marked in the widening of 4 feet narrow portions—under 12 feet width—on the first succeeding 64 miles in length for a width of 2 yards and 3 yards length.

8. All bridges and culverts, with exception of those mentioned in the following table and mentioned in paragraph 11, are now up to loads not exceeding 10 tons, or one carriage with maximum load and extending 2½ tons on any one axle. For loads greater than 2½ tons and up to 3 tons on any one axle, the bridges mentioned in the following table will require to be reconstructed.

Description of Culverts.	Remarks, for carrying out directions proposed.
23-4	One 9 feet with, drag 2½ feet thick.
24-4	One 12 feet for ground culvert.
27-4	One 20 feet with, drag 2½ feet thick.
27-4	One 4 feet wooden culvert.
28-2	One 4 do.
28-4	One 4 do. do.
29-2	One 4 do. do.
41-2	One 4 do. do.
	One 4 do. girths
	culvert

The amount of work being needs for loads over 2½ tons per mile.
The amount of dangerous position of culverts.
This bridge is needs for loads over 2½ tons per mile.
Beams lowered and needs for present traffic.
Beams too light for present traffic.
Beams lowered and needs for present traffic.
do. do. do.
do. do. do.
do. do. do.

9. The above noted culverts should be improved at an early date to meet requirements of present ordinary traffic and will cost about Rs. 1,000.

10. The three large bridges at 22-2, 22-3, and 42-2 are now only capable of carrying loads of 2½ tons per axle, and the maximum safe load on any one of the ordinary carriages or 3 axles each, as are now used in bringing up the heavy mining machinery must not exceed 2 tons and only one vehicle to be allowed on any bridge at a time. To make these bridges equal to the safe loads of 2½ tons per axle and up to not exceeding 4 tons on 3 axles as set has been done with culverts which have been noted above, would require a sum of Rs. 12,000 for the three bridges, which loads I have considered for but now the limits for the purpose of discussing the wheel loads.

11. To convert the above-mentioned bridges into structures capable of carrying loads over 3 tons on any one vehicle, up to 10 tons on 4 axles, would require a sum of Rs. 45,000.

12. The cost of these bridges would be for the purpose of discussing the proposals to be carried out to make the road safe and capable of meeting existing heavy traffic during fair weather and allowing a maximum load on any one vehicle of 4 tons on bridges at 22-2, 22-3, and 42-2, and of 10 tons on all other structures.

13. In the case of all loads over 2½ tons and up to 3 tons they must be carried on 4 axles at distance not less than 4 feet, and in the case of loads over 3 tons and up to 10 tons a flight carriage should be used with axles of flights at not less than 4 feet centres and the centres of

flights at not less than 20 feet apart. These loads must of course be clearly understood to include weight of the carriage or truck in every case.

14. If the road is to be made equal to carrying a quick and heavy traffic throughout the year with same axle loads as now allowed, then the following works would have to be carried out.

15. Widening of roadway to not less than 16 feet throughout.

16. The tracing and construction of about 5 to 6 miles of new road to bring the (existing heavy) grades on the 18, 22 ½, 27, 28, 36, 46 and 47 miles) down to 1 in 20, the greater portions of the work would be an easy side cutting.

17. Metalling with 9 inches of broken stone 12 feet wide throughout the length of 64 miles of road.

18. The removal of present trusses and girders at 22-2, 22-3, and 42-1 and replacing them by new girders of wrought iron.

19. The construction of an iron bridge over river at Ferroke Ferry on the 7th mile.

20. The amount required to carry out and complete the works above mentioned will be about Rs. 4,74,620, for details of which see my approximate estimate No. 2.

21. It would not, I think, be advisable to alter the present through route at Manjeri to the shorter line *viâ* Areakode. The latter is less important as a local road, and it would cost a much larger sum of money to carry out the necessary alterations in easying gradients and constructing bridges at 22-3 to make it suitable for quick and heavy through traffic than would be required for the corresponding section *viâ* Manjeri.

22. I am of opinion that loads over 3 tons on any single vehicle should not be allowed over any part of the road, but should the Board think it desirable to allow heavier loads than I would suggest that immediate notice be given that the loads to be admitted will only be such as are in accordance with those specified in paragraph 13, and under no circumstance should greater loads per axle or per carriage be allowed on to the road.

23. The whole of the very heavy machinery that has gone up to the Wynaad by the Kadiyi Gudi might easily have been sent out in a much more portable form, say in sections not exceeding 2½ tons each, if a little more and consideration had been bestowed upon the design, and the only additional cost to those most interested would have been a few rupees per ton on account of their destination.

24. There has been a considerable amount of damage done to many portions of the road surface owing to want of sufficient power to move the heavier loads of 2½ tons and upwards freely over the softer portions of road and some of the worst gradients. The bullocks are often not able to do more than just move the load, and whenever this occurs the men in charge begin shouting and swinging the carriage from side to side, thus trying to get it over the difficult part; this action very soon knocks up the road surface, and eventually in many cases a large hole is at last formed out of which it is often impossible to move the heavy which is then left standing on the road to the great inconvenience of the general traffic until the contractor can get additional cattle or other power.

25. This system of working the traffic is undoubtedly telling seriously on the weaker portions of this road and must be stopped at once; some fixed system that will ensure fair play being given to the covering material should be adopted and insisted upon being carried out. For loads over 2½ tons there should be not less than four bullocks per ton over all portion of the road.

26. The simplest and easiest way of preventing the safe loads being exceeded would be for the Board to have two or three Bogie carriages constructed, and notice should be given that loads over 3 tons and up to 10 tons (including weight of special carriage) shall only be allowed on to the road on one or other of these carriages and a charge made according to the class of load sufficient to recoup the Board, say even with two or three trips, and further the contractor should be bound to take the load through to its destination and back to Calicut or Ferroke Ferry within a specified time, failing which he should be fined or charged a certain fixed sum for each day over the time named. The weight of Bogie truck or carriage for maximum load would be about 2 tons, which leave 8 tons as the maximum load to be carried on a truck.

27. Looking at the question of communication between the Coast and Wynaad, I think it could hardly be advisable, in any interest of the Boards or of the district generally, to convert the existing Kadiyi Gudi route to Wynaad into a first-class road having an 18 feet formation, with 12 feet width of metalled surface, bridged throughout and capable of carrying a fast and heavy traffic with axle loads up to but not exceeding 2½ tons at a cost of Rs. 4,74,620. The expenditure of such a large sum of money on this road would not, I think be justifiable under any existing circumstances.

28. The distance from Calicut to Nadugani at the head of the ghât is 89 miles *viâ* Manjeri and to Devala 79½ miles; it touches the villages of Kondôtti, Manjeri, Edawannah, Nilambûr, and runs the Devala and Gudalûr valleys, thus leaving out entirely both North and South Wynaad.

30. The line that offers the greatest advantages both as regards commercial construction and also facilities in the way of easy and direct communication between the most important localities on the line of route, and between Wynaad and the Coast is undoubtedly the one from Calicut to Kotth and thence East to Wynaad via Thamarasseri Ghat. Two roads enter the plateau at Lackadi 30 miles from Calicut.

31. From Lackadi to Manantoddy is 31 miles, or a total distance of 61 miles from Calicut.

32. From Lackadi to Devala is 41 miles or a total distance of 71 miles from Calicut or against 113 miles to Devala on Kottiyur Ghat.

33. This line of communication pass through the following villages :—1st Section Kunnalur, Thennilai, Pookongode, Arikoor, Unneria and Manantoddy, and on the 2nd Section it touches the villages of Kaipini, Chembra, Wayanad, Chemchodi, Pandalur and Devala.

34. To make this road fit for a heavy rail grade traffic, it will have to be metalled throughout with a layer of broken stone not less than 9 inches thick and 12 feet wide.

35. The road between the coast and foot of ghat has some severe gradients, about 1 in 21 to 1 in 25 and 1 in 33. A new line and construction of say 4 or 5 miles of new road would probably make it to a fair rolling grade of 1 in 30.

36. The watershed crossed by both lines is very light, and with the exception of about four bridges on the Lackadi-Kunnamboy deviation there are no other large or important works to be constructed.

37. The timber with in all culverts and small bridges must be renewed.

38. The greater portion of the existing bungalow structures are strong enough to suit the requirements of a light line road with lots of 3/4 acre per mile and up to 10 acres per mile.

39. The cost of carrying out and completing the line from Calicut to Kotth and thence East to Wynaad via Thamarasseri Ghat to Manantoddy and Devala, including all bridges, culverts, buildings, permanent way, rolling stock, &c., &c., is estimated at Rs. 1,10,000 per mile.

40. The value of the land required for the line and the compensation for damages to crops, &c., during construction is estimated at Rs. 1,000 per mile.

41. The cost of a station and minor traffic conveniences is estimated at Rs. 2,000 each, and the working expenses per day would be Rs. 5 to Rs. 7, equal to Rs. 2-8 per mile per day. The gradient capable of being worked on a 30 lbs. rail is about 1 in 30 for the ghat portion.

42. I propose to use for bridge loading more than equal to 35 lbs. per lineal foot, and for the ghat portion 56 lbs. per lineal foot.

43. It may be mentioned that the present maintenance allowance are only 40 Rs. per mile, and 19 Rs. per mile for the Kottiyur Ghat. Temporary Huts, Engineers Huts, Rest-houses, Bridges, and Lackadi to Devala Station to Rest-house roads. The maintenance cost for Rest-house roads on the Ghat and over the Wynaad Plateau and Ghat Section Rs. 100 per mile.

44. Taking into consideration the heavy rolling that will have to be traversed in completing the roads and the further heavy annual maintenance allowance that will be required to keep them in good order, it would, I think, be very much more economical and conveniently good of the Government of the whole District generally for light narrow gauge railway were constructed instead of the line or roads proposed.

45. The cost required for maintenance of the 130 miles of proposed roads at the rate stated above would if capitalized be equal to 13 lakhs, or one third of the sum required to complete

I inspected somewhat hurriedly the country between Devala and Manantoddy and Vayitri and am satisfied that there is nothing likely to prevent the construction of a line that would allow of ruling gradients of 1 in 100 being developed, but to get a cheap surface line short lengths of 1 in 50 to 1 in 30 might be introduced.

Between Calicut and Lackadi the present road might be followed, and where wide enough one 30 feet and otherwise suitable the railway might be laid down on the one or other side of it, and thus as far as possible utilise a valuable property which, if the line is once constructed, will certainly be but little used except by small and unimportant local traffic between villages and homesteads situated between stations.

The whole of existing gradients between the coast and foot of ghat might be altered so as to give ruling gradient of 1 in 30 by new alignments that would necessitate the construction of say eight or nine miles of new cuttings and banks with average height of three feet and nine feet formations.

The watershed to be crossed by both the proposed lines as already mentioned in paragraph 36 is very light and the only large bridges required would be as per following table :—

Name of Section.	No. of water-waysrequired cole of feet sq. feet.	Clear water-way.	Remarks.
Calicut	2	50 feet.	One has abutments built in rubble chunam.
Lackadi ...	6	20 feet.	
	4	50	
Lackadi ...	2	40 feet.	One has abutments built in rubble and chunam.
Kunnatoddy ...	3	100 feet.	
Section	6	30 feet.	One has abutments built in rubble and chunam.
	1	200 feet.	
	1	250 feet.	
Lackadi ...	3	50	One has abutments built in rubble and chunam.
Devala ...	2	80	
Section ...	7	80	Piers and abutments built in rubble and chunam.
	1	400	

All other waterways would cost about Rs. 2,000 to Rs. 3,000 per mile.

The Vaccadoli Ghat is 8 miles in length and has an average gradient of 1 in 18; it could easily be worked by a rack railway and with one of Abts or Riggenbach's latest types of rack locomotives similar to those used on the Rorschaeh and Heiden Railway. Those locomotives are capable of working on an ordinary railway by adhesion; and by the adjustible rack wheel it can work on to the rack rail without stopping the train and are then capable of taking loads 4½ times their own weight up grades of 1 in 15 at 5 miles per hour.

The curves on this ghat are capable of being utilised; and but little alteration would be required if the whole ghat is given up entirely to the railway which it is believed might easily be done, by after opening of the line it could hardly be expected that any through traffic would exist that could warrant the keeping open of such an expensive line of communication.

This line is the more important when we consider that the alterations required to make it suitable for a narrow gauge—2 feet 6 inches—railway might be carried out within a year and the whole section up to Lackadi might be completed and opened for traffic within 18 months—after first starting of works—if this question of closing the road were granted.

It would be a shortsighted policy to withhold the entire use of this portion of the road, sanctioning the advantages it offers in giving us ready to hand such an important item as the completed earthworks of the ghat section of this railway would form, and also the fact that only a small and unimportant section of the community would be likely to suffer in consequence of the road being closed to ordinary traffic.

There are at present six J gauge on the ghat which could be worked by reversing stations, but two or three of these might be altered by putting in short curves of 1½ chain radius with grades of 1 in 12 to 1 in 6.

New cuttings to ease curves would have to be carried out at various points, amounting in all to, say, about 1 mile, with an average width of 4 yards and a height of 3 yards as per appended Estimate.

Four bridges, each of 50 feet span, would have to be constructed upon the ghat for the purpose of easing curves at sharp re-entering angles.

The cost of the main line to Devala and the branch to Manantoddy would be Rs. 36,29,095 as per appended Estimate No. 17 of Wynaad-Calicut Railway appended.

The probable working expenses are given in Estimate No. 9 and amount to Rs. 8,28,900.

The estimate for Railway plant and materials are based upon prices quoted during part month by three leading English firms who have had considerable experience in the especial requirements of such light lines as the one now proposed.

GOLD MOHUR.

COAST TO SOUTH-EAST WYNAAD.

Special Inspection in accordance with instructions of G.O., No. 1192, dated 27th June 1881, Revenue Department.

Date Number	Date.	Miles from Culvert.	Notes and Remarks by District Engineer.	Remarks of Sub-Divisional Officers or Overseers.
1	26th Oct. 1881.	...	Left Culvert and proceeded to Ramnad, 10½ miles. Found the road in very good condition throughout.	
2	...	...		
3	...	...	The only interruption to free communication on this section is the Pandie Ferry, where a very considerable loss of time takes place in transporting the wheeled traffic across the river.	
4	...	...	This river is some 350 feet in width, with a mean depth, at ordinary water level, and at highest tide, of 12 feet, and has a flood-water level of some 35 feet above this, or a total mean depth of water at highest floods of 47 feet approximately.	
5	...	1-7½		
6	28th Oct. 1881.	2-4	From 2 feet arch openings, all in good order.	
7	...	...	Thence to Kondotti, 10½ miles. Intervening road and bridges.	
8	...	3-1½	Two 4 feet arch openings, ring 1½ feet thick, in good order.	
9	...	3-4½	Two 4 feet arch openings, ring 1½ feet thick, in good order.	
10	...	3-7	One 4 feet arch, ring 1 foot thick, in good order.	
11	...	10-2	One 2 feet arch, ring 1 foot thick, in good order.	
12	...	10-5	One 2 feet arch, ring 1 foot thick, in good order.	
13	...	10-5½	One 2 feet arch, ring 1 foot thick, in good order.	
14	...	11-3½	One 2 feet arch, ring 1½ feet thick, in good order.	
15	...	11-5½	One 2 feet arch, ring 1½ feet thick, in good order.	
16	...	11-6	One 2 feet arch, ring 1½ feet thick, in good order.	
17	...	14-3	One 2 feet arch, ring 1 foot thick, in good order.	
18	...	14-5½	Three 12 feet flat top stone covers 2 feet thick, in good order.	
19	...	15-4	Three 4 feet arch, rings 1½ feet thick, in good order.	
20	...	15-4½	One 2 feet arch, ring 1 foot thick, in good order.	
21	...	15-5	One 2 feet arch, ring 1½ feet thick, in good order.	
			A good masonry might be opened for metal, if necessary, it could be supplied at some few 1-6-0 per cubic yard, but this work for any distance up to two miles.	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Date Number	Date.	Miles from Culvert.	Notes and Remarks by District Engineer.	Remarks of Sub-Divisional Officers or Overseers.
21	...	...	The whole section of road between Ramnad and Kondotti is in very good order, and road covering consists of laterite 4 to 6 inches thick and fit to convey a heavy traffic during dry weather.	
22	...	...	The average width of roadway is about 15 feet, on banks through paddyfields it is about 12 feet, and on side long ground is 18 feet.	
23	...	...	The gradients are easy, and there is no portion of the road that is likely to interfere with either quick light or slow heavy traffic.	
24	2nd Nov. 1881.	...	From Kondotti to Manjeri *viz* Road No. 6. This route is now used by the whole traffic between South-East Wynaad and the Coast, instead of the section of No. 5 Road between Edewannah and Kondotti *viz* Areacode. Notes on this section are appended.	
25	...	17-1	Two 4 feet arch, ring 1½ feet thick, in good order.	
26	...	17-4½	Two 4 feet flat covered culvert, over stones 9 inches thick, in good order.	
27	...	17-5½ to 17-3½	Rising grade of 1 in 18, road surface in good order.	
28	...	17-7½ to 18-0	Falling grade of 1 in 18.	
29	...	18-1½	Two 4 feet flat covered culvert, over stones 9 inches thick, in good order.	
30	...	20-3½	One 6 feet arch, ring 1½ feet thick, in good order.	
31	...	20-7½	A good stone metal quarry could be opened, and would cost probably 12 annas, broken into cubes 1½ inches at quarry site.	
32	...	21-6½	One 4 feet arch, ring 1½ feet thick, in good order.	
33	...	22-0	One 9 feet arch (ring 2½ feet thick), in good order; parapet walls want raising. This culvert is an old structure, and has been built very irregularly, it is, however, still well suited to carry ordinary traffic of, say, up to 2 tons per axle for years to come. It is considered necessary a light rail girder, capable of carrying heavier loads, could be erected at a cost of Rs. 500.	
34	...	22-3	A good metal quarry might be opened.	
35	...	22-0 to 22-3½	A rising grade of 1 in 16; road in good order.	
36	...	23-3½ to 23-5½	Falling grade 1 in 16, in good order.	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—*cont.*

Date Received	Date.	Miles from Cuttack.	Notes and Remarks by District Engineer.	Remarks of Sub-Divisional Officer or Overseer.
42		23-6		
43	3rd Nov. 1881.	24-2	One 8 feet arch, ring 1 foot thick, in good order. Two 6 feet arch, ring 1½ feet thick, in good order. Road No. 20, portion of Gold Road (6.75 Miles). Temporary steel and bridges dismantled and stored. One 4 feet arch, ring 1 foot thick, in good order.	
44		24-6		
45		25-2 to 25-4		
46		25-6	One 14 feet flat arched culvert, covered over with 6 inches rock and the other 2 inches thick, of a total of 22 inches thickness. This bridge will be well enough for cattle and traffic, but with the commencement of the rains large trees are brought down by the current, obstruction ensues to the passage of water, and the road is thus flooded, rendering traffic impossible. This culvert is on a metal road, and it is a pity it was not kept in repair by the contractor.	
47		26-2 to 26-4		
48		26-6 to 26-7		
49	4th Nov. 1881.	26-7 to 27-0	Rising grade of 1 in 15.	
50		27-0 to 27-2	Falling grade of 1 in 15.	
51		27-2 to 27-4	Rising grade of 1 in 15.	
52		27-4 to 27-6	Falling grade of 1 in 15.	
53		27-6 to 27-8	Rising grade of 1 in 15.	
54		27-8 to 28-0	Falling grade of 1 in 15.	
55		28-0 to 28-2	Rising grade of 1 in 15.	
56		28-2 to 28-4	Falling grade of 1 in 15.	
57		28-4 to 28-6	Rising grade of 1 in 15.	
58		28-6 to 28-7	Falling grade of 1 in 15.	
59		28-7 to 28-8	Rising grade of 1 in 15.	
60		28-8 to 29-0	Falling grade of 1 in 15.	
61		29-0 to 29-2	Rising grade of 1 in 15.	
62		29-2 to 29-4	Falling grade of 1 in 15.	
63		29-4 to 29-6	Rising grade of 1 in 15.	
64		29-6 to 29-8	Falling grade of 1 in 15.	
65		29-8 to 30-0	Rising grade of 1 in 15.	
66		30-0 to 30-2	Falling grade of 1 in 15.	
67		30-2 to 30-4	Rising grade of 1 in 15.	
68		30-4 to 30-6	Falling grade of 1 in 15.	
69		30-6 to 30-8	Rising grade of 1 in 15.	
70		30-8 to 31-0	Falling grade of 1 in 15.	
71		31-0 to 31-2	Rising grade of 1 in 15.	
72		31-2 to 31-4	Falling grade of 1 in 15.	
73		31-4 to 31-6	Rising grade of 1 in 15.	
74		31-6 to 31-8	Falling grade of 1 in 15.	
75		31-8 to 32-0	Rising grade of 1 in 15.	
76		32-0 to 32-2	Falling grade of 1 in 15.	
77		32-2 to 32-4	Rising grade of 1 in 15.	
78		32-4 to 32-6	Falling grade of 1 in 15.	
79		32-6 to 32-8	Rising grade of 1 in 15.	
80		32-8 to 33-0	Falling grade of 1 in 15.	
81		33-0 to 33-2	Rising grade of 1 in 15.	
82		33-2 to 33-4	Falling grade of 1 in 15.	
83		33-4 to 33-6	Rising grade of 1 in 15.	
84		33-6 to 33-8	Falling grade of 1 in 15.	
85		33-8 to 34-0	Rising grade of 1 in 15.	
86		34-0 to 34-2	Falling grade of 1 in 15.	
87		34-2 to 34-4	Rising grade of 1 in 15.	
88		34-4 to 34-6	Falling grade of 1 in 15.	
89		34-6 to 34-8	Rising grade of 1 in 15.	
90		34-8 to 35-0	Falling grade of 1 in 15.	
91		35-0 to 35-2	Rising grade of 1 in 15.	
92		35-2 to 35-4	Falling grade of 1 in 15.	
93		35-4 to 35-6	Rising grade of 1 in 15.	
94		35-6 to 35-8	Falling grade of 1 in 15.	
95		35-8 to 36-0	Rising grade of 1 in 15.	
96		36-0 to 36-2	Falling grade of 1 in 15.	
97		36-2 to 36-4	Rising grade of 1 in 15.	
98		36-4 to 36-6	Falling grade of 1 in 15.	
99		36-6 to 36-8	Rising grade of 1 in 15.	
100		36-8 to 37-0	Falling grade of 1 in 15.	
101		37-0 to 37-2	Rising grade of 1 in 15.	
102		37-2 to 37-4	Falling grade of 1 in 15.	
103		37-4 to 37-6	Rising grade of 1 in 15.	
104		37-6 to 37-8	Falling grade of 1 in 15.	
105		37-8 to 38-0	Rising grade of 1 in 15.	
106		38-0 to 38-2	Falling grade of 1 in 15.	
107		38-2 to 38-4	Rising grade of 1 in 15.	
108		38-4 to 38-6	Falling grade of 1 in 15.	
109		38-6 to 38-8	Rising grade of 1 in 15.	
110		38-8 to 39-0	Falling grade of 1 in 15.	
111		39-0 to 39-2	Rising grade of 1 in 15.	
112		39-2 to 39-4	Falling grade of 1 in 15.	
113		39-4 to 39-6	Rising grade of 1 in 15.	
114		39-6 to 39-8	Falling grade of 1 in 15.	
115		39-8 to 40-0	Rising grade of 1 in 15.	
116		40-0 to 40-2	Falling grade of 1 in 15.	
117		40-2 to 40-4	Rising grade of 1 in 15.	
118		40-4 to 40-6	Falling grade of 1 in 15.	
119		40-6 to 40-8	Rising grade of 1 in 15.	
120		40-8 to 41-0	Falling grade of 1 in 15.	
121		41-0 to 41-2	Rising grade of 1 in 15.	
122		41-2 to 41-4	Falling grade of 1 in 15.	
123		41-4 to 41-6	Rising grade of 1 in 15.	
124		41-6 to 41-8	Falling grade of 1 in 15.	
125		41-8 to 42-0	Rising grade of 1 in 15.	
126		42-0 to 42-2	Falling grade of 1 in 15.	
127		42-2 to 42-4	Rising grade of 1 in 15.	
128		42-4 to 42-6	Falling grade of 1 in 15.	
129		42-6 to 42-8	Rising grade of 1 in 15.	
130		42-8 to 43-0	Falling grade of 1 in 15.	
131		43-0 to 43-2	Rising grade of 1 in 15.	
132		43-2 to 43-4	Falling grade of 1 in 15.	
133		43-4 to 43-6	Rising grade of 1 in 15.	
134		43-6 to 43-8	Falling grade of 1 in 15.	
135		43-8 to 44-0	Rising grade of 1 in 15.	
136		44-0 to 44-2	Falling grade of 1 in 15.	
137		44-2 to 44-4	Rising grade of 1 in 15.	
138		44-4 to 44-6	Falling grade of 1 in 15.	
139		44-6 to 44-8	Rising grade of 1 in 15.	
140		44-8 to 45-0	Falling grade of 1 in 15.	
141		45-0 to 45-2	Rising grade of 1 in 15.	
142		45-2 to 45-4	Falling grade of 1 in 15.	
143		45-4 to 45-6	Rising grade of 1 in 15.	
144		45-6 to 45-8	Falling grade of 1 in 15.	
145		45-8 to 46-0	Rising grade of 1 in 15.	
146		46-0 to 46-2	Falling grade of 1 in 15.	
147		46-2 to 46-4	Rising grade of 1 in 15.	
148		46-4 to 46-6	Falling grade of 1 in 15.	
149		46-6 to 46-8	Rising grade of 1 in 15.	
150		46-8 to 47-0	Falling grade of 1 in 15.	
151		47-0 to 47-2	Rising grade of 1 in 15.	
152		47-2 to 47-4	Falling grade of 1 in 15.	
153		47-4 to 47-6	Rising grade of 1 in 15.	
154		47-6 to 47-8	Falling grade of 1 in 15.	
155		47-8 to 48-0	Rising grade of 1 in 15.	
156		48-0 to 48-2	Falling grade of 1 in 15.	
157		48-2 to 48-4	Rising grade of 1 in 15.	
158		48-4 to 48-6	Falling grade of 1 in 15.	
159		48-6 to 48-8	Rising grade of 1 in 15.	
160		48-8 to 49-0	Falling grade of 1 in 15.	
161		49-0 to 49-2	Rising grade of 1 in 15.	
162		49-2 to 49-4	Falling grade of 1 in 15.	
163		49-4 to 49-6	Rising grade of 1 in 15.	
164		49-6 to 49-8	Falling grade of 1 in 15.	
165		49-8 to 50-0	Rising grade of 1 in 15.	
166		50-0 to 50-2	Falling grade of 1 in 15.	
167		50-2 to 50-4	Rising grade of 1 in 15.	
168		50-4 to 50-6	Falling grade of 1 in 15.	
169		50-6 to 50-8	Rising grade of 1 in 15.	
170		50-8 to 51-0	Falling grade of 1 in 15.	
171		51-0 to 51-2	Rising grade of 1 in 15.	
172		51-2 to 51-4	Falling grade of 1 in 15.	
173		51-4 to 51-6	Rising grade of 1 in 15.	
174		51-6 to 51-8	Falling grade of 1 in 15.	
175		51-8 to 52-0	Rising grade of 1 in 15.	
176		52-0 to 52-2	Falling grade of 1 in 15.	
177		52-2 to 52-4	Rising grade of 1 in 15.	
178		52-4 to 52-6	Falling grade of 1 in 15.	
179		52-6 to 52-8	Rising grade of 1 in 15.	
180		52-8 to 53-0	Falling grade of 1 in 15.	
181		53-0 to 53-2	Rising grade of 1 in 15.	
182		53-2 to 53-4	Falling grade of 1 in 15.	
183		53-4 to 53-6	Rising grade of 1 in 15.	
184		53-6 to 53-8	Falling grade of 1 in 15.	
185		53-8 to 54-0	Rising grade of 1 in 15.	
186		54-0 to 54-2	Falling grade of 1 in 15.	
187		54-2 to 54-4	Rising grade of 1 in 15.	
188		54-4 to 54-6	Falling grade of 1 in 15.	
189		54-6 to 54-8	Rising grade of 1 in 15.	
190		54-8 to 55-0	Falling grade of 1 in 15.	
191		55-0 to 55-2	Rising grade of 1 in 15.	
192		55-2 to 55-4	Falling grade of 1 in 15.	
193		55-4 to 55-6	Rising grade of 1 in 15.	
194		55-6 to 55-8	Falling grade of 1 in 15.	
195		55-8 to 56-0	Rising grade of 1 in 15.	
196		56-0 to 56-2	Falling grade of 1 in 15.	
197		56-2 to 56-4	Rising grade of 1 in 15.	
198		56-4 to 56-6	Falling grade of 1 in 15.	
199		56-6 to 56-8	Rising grade of 1 in 15.	
200		56-8 to 57-0	Falling grade of 1 in 15.	
201		57-0 to 57-2	Rising grade of 1 in 15.	
202		57-2 to 57-4	Falling grade of 1 in 15.	
203		57-4 to 57-6	Rising grade of 1 in 15.	
204		57-6 to 57-8	Falling grade of 1 in 15.	
205		57-8 to 58-0	Rising grade of 1 in 15.	
206		58-0 to 58-2	Falling grade of 1 in 15.	
207		58-2 to 58-4	Rising grade of 1 in 15.	
208		58-4 to 58-6	Falling grade of 1 in 15.	
209		58-6 to 58-8	Rising grade of 1 in 15.	
210		58-8 to 59-0	Falling grade of 1 in 15.	
211		59-0 to 59-2	Rising grade of 1 in 15.	
212		59-2 to 59-4	Falling grade of 1 in 15.	
213		59-4 to 59-6	Rising grade of 1 in 15.	
214		59-6 to 59-8	Falling grade of 1 in 15.	
215		59-8 to 60-0	Rising grade of 1 in 15.	
216		60-0 to 60-2	Falling grade of 1 in 15.	
217		60-2 to 60-4	Rising grade of 1 in 15.	
218		60-4 to 60-6	Falling grade of 1 in 15.	
219		60-6 to 60-8	Rising grade of 1 in 15.	
220		60-8 to 61-0	Falling grade of 1 in 15.	
221		61-0 to 61-2	Rising grade of 1 in 15.	
222		61-2 to 61-4	Falling grade of 1 in 15.	
223		61-4 to 61-6	Rising grade of 1 in 15.	
224		61-6 to 61-8	Falling grade of 1 in 15.	
225		61-8 to 62-0	Rising grade of 1 in 15.	
226		62-0 to 62-2	Falling grade of 1 in 15.	
227		62-2 to 62-4	Rising grade of 1 in 15.	
228		62-4 to 62-6	Falling grade of 1 in 15.	
229		62-6 to 62-8	Rising grade of 1 in 15.	
230		62-8 to 63-0	Falling grade of 1 in 15.	
231		63-0 to 63-2	Rising grade of 1 in 15.	
232		63-2 to 63-4	Falling grade of 1 in 15.	
233		63-4 to 63-6	Rising grade of 1 in 15.	
234		63-6 to 63-8	Falling grade of 1 in 15.	
235		63-8 to 64-0	Rising grade of 1 in 15.	
236		64-0 to 64-2	Falling grade of 1 in 15.	
237		64-2 to 64-4	Rising grade of 1 in 15.	
238		64-4 to 64-6	Falling grade of 1 in 15.	
239		64-6 to 64-8	Rising grade of 1 in 15.	
240		64-8 to 65-0	Falling grade of 1 in 15.	
241		65-0 to 65-2	Rising grade of 1 in 15.	
242		65-2 to 65-4	Falling grade of 1 in 15.	
243		65-4 to 65-6	Rising grade of 1 in 15.	
244		65-6 to 65-8	Falling grade of 1 in 15.	
245		65-8 to 66-0	Rising grade of 1 in 15.	
246		66-0 to 66-2	Falling grade of 1 in 15.	
247		66-2 to 66-4	Rising grade of 1 in 15.	
248		66-4 to 66-6	Falling grade of 1 in 15.	
249		66-6 to 66-8	Rising grade of 1 in 15.	
250		66-8 to 67-0	Falling grade of 1 in 15.	
251		67-0 to 67-2	Rising grade of 1 in 15.	
252		67-2 to 67-4	Falling grade of 1 in 15.	
253		67-4 to 67-6	Rising grade of 1 in 15.	
254		67-6 to 67-8	Falling grade of 1 in 15.	
255		67-8 to 68-0	Rising grade of 1 in 15.	
256		68-0 to 68-2	Falling grade of 1 in 15.	
257		68-2 to 68-4	Rising grade of 1 in 15.	
258		68-4 to 68-6	Falling grade of 1 in 15.	
259		68-6 to 68-8	Rising grade of 1 in 15.	
260		68-8 to 69-0	Falling grade of 1 in 15.	
261		69-0 to 69-2	Rising grade of 1 in 15.	
262		69-2 to 69-4	Falling grade of 1 in 15.	
263		69-4 to 69-6	Rising grade of 1 in 15.	
264		69-6 to 69-8	Falling grade of 1 in 15.	
265		69-8 to 70-0	Rising grade of 1 in 15.	
266		70-0 to 70-2	Falling grade of 1 in 15.	
267		70-2 to 70-4	Rising grade of 1 in 15.	
268		70-4 to 70-6	Falling grade of 1 in 15.	
269		70-6 to 70-8	Rising grade of 1 in 15.	
270		70-8 to 71-0	Falling grade of 1 in 15.	
271		71-0 to 71-2	Rising grade of 1 in 15.	
272		71-2 to 71-4	Falling grade of 1 in 15.	
273		71-4 to 71-6	Rising grade of 1 in 15.	
274		71-6 to 71-8	Falling grade of 1 in 15.	
275		71-8 to 72-0	Rising grade of 1 in 15.	
276		72-0 to 72-2	Falling grade of 1 in 15.	
277		72-2 to 72-4	Rising grade of 1 in 15.	
278		72-4 to 72-6	Falling grade of 1 in 15.	
279		72-6 to 72-8	Rising grade of 1 in 15.	
280		72-8 to 73-0	Falling grade of 1 in 15.	
281		73-0 to 73-2	Rising grade of 1 in 15.	
282		73-2 to 73-4	Falling grade of 1 in 15.	
283		73-4 to 73-6	Rising grade of 1 in 15.	
284		73-6 to 73-8	Falling grade of 1 in 15.	
285		73-8 to 74-0	Rising grade of 1 in 15.	
286		74-0 to 74-2	Falling grade of 1 in 15.	
287		74-2 to 74-4	Rising grade of 1 in 15.	
288		74-4 to 74-6	Falling grade of 1 in 15.	
289		74-6 to 74-8	Rising grade of 1 in 15.	
290		74-8 to 75-0	Falling grade of 1 in 15.	
291		75-0 to 75-2	Rising grade of 1 in 15.	
292		75-2 to 75-4	Falling grade of 1 in 15.	
293		75-4 to 75-6	Rising grade of 1 in 15.	
294		75-6 to 75-8	Falling grade of 1 in 15.	
295		75-8 to 76-0	Rising grade of 1 in 15.	
296		76-0 to 76-2	Falling grade of 1 in 15.	
297		76-2 to 76-4	Rising grade of 1 in 15.	
298		76-4 to 76-6	Falling grade of 1 in 15.	
299		76-6 to 76-8	Rising grade of 1 in 15.	
300		76-8 to 77-0	Falling grade of 1 in 15.	
301		77-0 to 77-2	Rising grade of 1 in 15.	
302		77-2 to 77-4	Falling grade of 1 in 15.	
303		77-4 to 77-6	Rising grade of 1 in 15.	
304		77-6 to 77-8	Falling grade of 1 in 15.	
305		77-8 to 78-0	Rising grade of 1 in 15.	
306		78-0 to 78-2	Falling grade of 1 in 15.	
307		78-2 to 78-4	Rising grade of 1 in 15.	
308		78-4 to 78-6	Falling grade of 1 in 15.	
309		78-6 to 78-8	Rising grade of 1 in 15.	
310		78-8 to 79-0	Falling grade of 1 in 15.	
311		79-0 to 79-2	Rising grade of 1 in 15.	
312		79-2 to 79-4	Falling grade of 1 in 15.	
313		79-4 to 79-6	Rising grade of 1 in 15.	
314		79-6 to 79-8	Falling grade of 1 in 15.	
315		79-8 to 80-0	Rising grade of 1 in 15.	
316		80-0 to 80-2	Falling grade of 1 in 15.	
317		80-2 to 80-4	Rising grade of 1 in 15.	
318		80-4 to 80-6	Falling grade of 1 in 15.	
319		80-6 to 80-8	Rising grade of 1 in 15.	
320		80-8 to 81-0	Falling grade of 1 in 15.	
321		81-0 to 81-2	Rising grade of 1 in 15.	
322		81-2 to 81-4	Falling grade of 1 in 15.	
323		81-4 to 81-6	Rising grade of 1 in 15.	
324		81-6 to 81-8	Falling grade of 1 in 15.	
325		81-8 to 82-0	Rising grade of 1 in 15.	
326		82-0 to 82-2	Falling grade of 1 in 15.	
327		82-2 to 82-4	Rising grade of 1 in 15.	
328		82-4 to 82-6	Falling grade of 1 in 15.	
329		82-6 to 82-8	Rising grade of 1 in 15.	
330		82-8 to 83-0	Falling grade of 1 in 15.	
331		83-0 to 83-2	Rising grade of 1 in 15.	
332		83-2 to 83-4	Falling grade of 1 in 15.	
333		83-4 to 83-6	Rising grade of 1 in 15.	
334		83-6 to 83-8	Falling grade of 1 in 15.	
335		83-8 to 84-0	Rising grade of 1 in 15.	
336		84-0 to 84-2	Falling grade of 1 in 15.	
337		84-2 to 84-4	Rising grade of 1 in 15.	
338		84-4 to 84-6	Falling grade of 1 in 15.	
339		84-6 to 84-8	Rising grade of 1 in 15.	
340		84-8 to 85-0	Falling grade of 1 in 15.	
341		85-0 to 85-2	Rising grade of 1 in 15.	
342		85-2 to 85-4	Falling grade of 1 in 15.	
343		85-4 to 85-6	Rising grade of 1 in 15.	
344		85-6 to 85-8	Falling grade of 1 in 15.	
345		85-8 to 86-0	Rising grade of 1 in 15.	
346		86-0 to 86-2	Falling grade of 1 in 15.	
347		86-2 to 86-4	Rising grade of 1 in 15.	
348		86-4 to 86-6	Falling grade of 1 in 15.	
349		86-6 to 86-8	Rising grade of 1 in 15.	
350		86-8 to 87-0	Falling grade of 1 in 15.	
351		87-0 to 87-2	Rising grade of 1 in 15.	
352		87-2 to 87-4	Falling grade of 1 in 15.	
353		87-4 to 87-6	Rising grade of 1 in 15.	
354		87-6 to 87-8	Falling grade of 1 in 15.	
355		87-8 to 88-0	Rising grade of 1 in 15.	
356		88-0 to 88-2	Falling grade of 1 in 15.	
357		88-2 to 88-4	Rising grade of 1 in 15.	
358		88-4 to 88-6	Falling grade of 1 in 15.	
359		88-6 to 88-8	Rising grade of 1 in 15.	
360		88-8 to 89-0	Falling grade of 1 in 15.	
361		89-0 to 89-2	Rising grade of 1 in 15.	
362		89-2 to 89-4	Falling grade of 1 in 15.	
363		89-4 to 89-6	Rising grade of 1 in 15.	
364		89-6 to 89-8	Falling grade of 1 in 15.	
365		89-8 to 90-0	Rising grade of 1 in 15.	
366		90-0 to 90-2	Falling grade of 1 in 15.	
367		90-2 to 90-4	Rising grade of 1 in 15.	
368		90-4 to 90-6	Falling grade of 1 in 15.	
369		90-6 to 90-8	Rising grade of 1 in 15.	
370		90-8 to 91-0	Falling grade of 1 in 15.	
371		91-0 to 91-2	Rising grade of 1 in 15.	
372		91-2 to 91-4	Falling grade of 1 in 15.	
373		91-4 to 91-6	Rising grade of 1 in 15.	
374		91-6 to 91-8	Falling grade of 1 in 15.	
375		91-8 to 92-0	Rising grade of 1 in 15.	
376		92-0 to 92-2	Falling grade of 1 in 15.	
377		92-2 to 92-4	Rising grade of 1 in 15.	
378		92-4 to 92-6	Falling grade of 1 in 15.	
379		92-6 to 92-8	Rising grade of 1 in 15.	
380		92-8 to 93-0	Falling grade of 1 in 15.	
381		93-0 to 93-2	Rising grade of 1 in 15.	
382		93-2 to 93-4	Falling grade of 1 in 15.	
383		93-4 to 93-6	Rising grade of 1 in 15.	
384		93-6 to 93-8	Falling grade of 1 in 15.	
385		93-8 to 94-0	Rising grade of 1 in 15.	
386		94-0 to 94-2	Falling grade of 1 in 15.	
387		94-2 to 94-4	Rising grade of 1 in 15.	
388		94-4 to 94-6	Falling grade of 1 in 15.	
389		94-6 to 94-8	Rising grade of 1 in 15.	
390		94-8 to 95-0	Falling grade of 1 in 15.	
391		95-0 to 95-2	Rising grade of 1 in 15.	
392		95-2 to 95-4	Falling grade of 1 in 15.	
393		95-4 to 95-6	Rising grade of 1 in 15.	
394		95-6 to 95-8	Falling grade of 1 in 15.	
395		95-8 to 96-0	Rising grade of 1 in 15.	
396		96-0 to 96-2	Falling grade of 1 in 15.	
397		96-2 to 96-4	Rising grade of 1 in 15.	
398		96-4 to 96-6	Falling grade of 1 in 15.	
399		96-6 to 96-8	Rising grade of 1 in 15.	
400		96-8 to 97-0	Falling grade of 1 in 15.	
401		97-0 to 97-2	Rising grade of 1 in 15.	
402		97-2 to 97-4	Falling grade of 1 in 15.	
403		97-4 to 97-6	Rising grade of 1 in 15.	
404		97-6 to 97-8	Falling grade of 1 in 15.	
405		97-8 to 98-0	Rising grade of 1 in 15.	
406		98-0 to 98-2	Falling grade of 1 in 15.	
407		98-2 to 98-4	Rising grade of 1 in 15.	
408		98-4 to 98-6	Falling grade of 1 in 15.	
409		98-6 to 98-8	Rising grade of 1 in 15.	
410		98-8 to 99-0	Falling grade of 1 in 15.	
411		99-0 to 99-2	Rising grade of 1 in 15.	
412		99-2 to 99-4	Falling grade of 1 in 15.	
413		99-4 to 99-6	Rising grade of 1 in 15.	
414		99-6 to 99-8	Falling grade of 1 in 15.	
415		99-8 to 100-0	Rising grade of 1 in 15.	
416		100-0 to 100-2	Falling grade of 1 in 15.	
417		100-2 to 100-4	Rising grade of 1 in 15.	
418		100-4 to 100-6	Falling grade of 1 in 15.	
419		100-6 to 100-8	Rising grade of 1 in 15.	
420		100-8 to 101-0	Falling grade of 1 in 15.	
421		101-0 to 101-2	Rising grade of 1 in 15.	
422		101-2 to 101-4	Falling grade of 1 in 15.	
423		101-4 to 101-6	Rising grade of 1 in 15.	
424		101-6 to 101-8	Falling grade of 1 in 15.	
425		101-8 to 102-0	Rising grade of 1 in 15.	
426		102-0 to 102-2	Falling grade of 1 in 15.	
427		102-2 to 102-4	Rising grade of 1 in 15.	
428		102-4 to 102-6	Falling grade of 1 in 15.	
429		102-6 to 102-8	Rising grade of 1 in 15.	
430		102-8 to 103-0	Falling grade of 1 in 15.	
431		103-0 to 103-2	Rising grade of 1 in 15.	
432		103-2 to 103-4	Falling grade of 1 in 15.	
433		103-4 to 103-6	Rising grade of 1 in 15.	
434		103-6 to 103-8	Falling grade of 1 in 15.	
435		103-8 to 104-0	Rising grade of 1 in 15.	
436		104-0 to 104-2	Falling grade of 1 in 15.	
437		104-2 to 104-4	Rising grade of 1 in 15.	
438		104-4 to 104-6	Falling grade of 1 in 15.	
439		104-6 to 104-8	Rising grade of 1 in 15.	
440		104-8 to 105-0	Falling grade of 1 in 15.	
441		105-0 to 105-2	Rising grade of 1 in 15.	
442		105-2 to 105-4	Falling grade of 1 in 15.	
443		105-4 to 105-6	Rising grade of 1 in 15.	
444		105-6 to 105-8	Falling grade of 1 in 15.	
445		105-8 to 106-0	Rising grade of 1 in 15.	
446		106-0 to 106-2	Falling grade of 1 in 15.	
447		106-2 to 106-4	Rising grade of 1 in 15.	
448		106-4 to 106-6	Falling grade of 1 in 15.	
449		106-6 to 106-8	Rising grade of 1 in 15.	
450		106-8 to 107-0	Falling grade of 1 in 15.	
451		107-0 to 107-2	Rising grade of 1 in 15.	
452		107-2 to 107-4	Falling grade of 1 in 15.	
453		107-4 to 107-6	Rising grade of 1 in 15.	
454		107-6 to 107-8	Falling grade of 1 in 15.	
455		107-8 to 108-0	Rising grade of 1 in 15.	
456		108-0 to 108-2	Falling grade of 1 in 15.	
457		108-2 to 108-4	Rising grade of 1 in 15.	
458		108-4 to 108-6	Falling grade of 1 in 15.	
459		108-6 to 108-8	Rising grade of 1 in 15.	
460		108-8 to 109-0	Falling grade of 1 in 15.	
461		109-0 to 109-2	Rising grade of 1 in 15.	
462		109-2 to 109-4	Falling grade of 1 in 15.	
463		109-4 to 109-6	Rising grade of 1 in 15.	
464		109-6 to 109-8	Falling grade of 1 in 15.	
465		109-8 to 110-0	Rising grade of 1 in 15.	
466		110-0 to 110-2	Falling grade of 1 in 15.	
467		110-2 to 110-4	Rising grade of 1 in 15.	
468		110-4 to 110-6	Falling grade of 1 in 15.	
469		110-6 to 110-8	Rising grade of 1 in 15.	
470		110-8 to 111-0	Falling grade of 1 in 15.	
471		111-0 to 111-2	Rising grade of 1 in 15.	
472		111-2 to 111-4	Falling grade of 1 in 15.	
473		111-4 to 111-6	Rising grade of 1 in 15.	
474		111-6 to 111-8	Falling grade of 1 in 15.	
475		111-8 to 112-0	Rising grade of 1 in 15.	
476		112-0 to 112-2	Falling grade of 1 in 15.	
477		112-2 to 112-4	Rising grade of 1 in 15.	
478		112-4 to 112-6	Falling grade of 1 in 15.	
479		112-6 to 112-8	Rising grade of 1 in 15.	
480		112-8 to 113-0	Falling grade of 1 in 15.	
481		113-0 to 113-2	Rising grade of 1 in 15.	
482		113-2 to 113-4	Falling grade of 1 in 15.	
483		113-4 to 113-6	Rising grade of 1 in 15.	
484		113-6 to 113-8	Falling grade of 1 in 15.	
485		113-8 to 114-0	Rising grade of 1 in 15.	
486		114-0 to 114-2	Falling grade of 1 in 15.	
487		114-2 to 114-4	Rising grade of 1 in 15.	
488		114-4 to 114-6	Falling grade of 1 in 15.	
489		114-6 to 114-8	Rising grade of 1 in 15.	
490		114-8 to 115-0	Falling grade of 1 in 15.	
491		115-0 to 115-2	Rising grade of 1 in 15.	
492		115-2 to 115-4	Falling grade of 1 in 15.	
493		115-4 to 115-6	Rising grade of 1 in 15.	
494		115-6 to 115-8	Falling grade of 1 in 15.	
495		115-8 to 116-0	Rising grade of 1 in 15.	
496		116-0 to 116-2	Falling grade of 1 in 15.	
497		116-2 to 116-4	Rising grade of 1 in 15.	
498		116-4 to 116-6	Falling grade of 1 in 15.	
499		116-6 to 116-8	Rising grade of 1 in 15.	
500		116-8 to 117-0	Falling grade of 1 in 15.	
501		117-0 to 117-2	Rising grade of 1 in 15.	
502		117-2

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Date Number	Date	Miles from Cabinet.	Notes and Remarks by District Engineer.	Remarks of Sub-Divisional Officer or Overseer.
50	9th Nov., 1881.	35-6	Manjhri to Ellorawah (cross Road No. portion of district Road). One 16 feet span plate wooden beam (2" + 24") No. 1 girder in width of roadway at 8 feet 4 inches centres. This bridge is all in good order and up to any weight. The waterway is insufficient, and an additional span should be added, or a clear opening of 20 feet width and 4 feet clear height to underside of girder is required. During heavy floods the water rises over the roadway to south of bridge for a length of 50 feet with average depth of 1 foot. The existing north abutment, which consists of 3 courses of laterite stone in cement, forts on very hard laterite rock at 3 feet below the present and proposed girder bed level. The new south abutments would have to be carried down 3 feet below metal bed, or a total depth of 4 feet below girder bed level.	
51			At junction of Ellorawah road there is no approached wall close up to side of road; it is in a most dangerous condition. Overseer has been ordered to raise a parapet wall 2 feet high and 1½ feet thick all round it.	
52	...	35-6 to 36-3	There is a rising grade of 1 in 12, road surface in good order. The grade might be used between the points named if a new lines was made up the river side of a valley. The time and construction would not be very heavy, and the whole cost would probably not exceed Rs. 4,000.	
53	...	36-4 to 36-12	There is a falling grade of 1 in 15, and here again no alteration for the better could be effected by a new lines and construction of ¼ of a mile of new road at a cost of, say, Rs. 3,000, including land charges, &c.	
54	...	36-6	Two 6 feet arch, ring 1½ feet thick, all in good order.	
55	...	36-8	Road No. 1, Gold Road proper; two 16 feet semi-circular arch, ring 1½ feet thick, masonry heavily in the water, half of this bridge was only very recently rebuilt. The whole structure is in good order.	
56	...	36-9	Two 6 feet arch, ring 1½ feet thick, all in good order.	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Date Number	Date	Miles from Cabinet.	Notes and Remarks by District Engineer.	Remarks of Sub-Divisional Officer or Overseer.
37	...	38	One 25 feet arch, semi-circular, ring 2½ feet thick. This bridge shows a crack right along longitudinal centre line. The crack was first discovered about 9 months ago, and the plaster that was then laid over it shows no signs of disturbance. I do not think the crack is likely to increase or be enlarged. I have ordered three tie rods to be laid through the spandril walls, and this will be sufficient to prevent any further damage. Bridge is otherwise in good order and up to any weight under 20 tons.	
38	...	37-5	Ellorawah to Nilambir section. One 15 feet arch, ring 1½ feet thick, all in good order.	
39	...	38-0	Kingathoodoo Bridge. This bridge consists of three wooden trusses, each of 31 feet clear span, and height of roadway above Nullah, 25ft at highest pier is 30 feet. With the exception of some petty repairs there has been nothing done to this bridge since it was built 10 to this bridge since it was built 10 years ago. There are three trusses carrying roadway in each span. The ends of the trusses carried by piers rest directly over a column, of which there are three forming each of the trestle piers. The trusses are all in fairly good order with exception of the outside one on upstream side in No. 1 span. The main or stringer beam and the distance pieces between ends or tops of struts on the trusses are very much decayed, and the heavy traffic should be confined to two-wheel trunks laid along on both sides of the centre trusses in each span. Plan and estimates will be sent in for carrying out this work. The piers are in fairly good order, but signs of dry rot have appeared at the ground line of each column; it, however, only effects the sapwood portions. No. 1 pier is 30 feet in height and requires diagonal trussing. Some of the joints are beginning to show signs of dry rot. The roadway planking is all very much decayed on underside of planks, and although suited to carry the ordinary loads of common country carts, it is very unsafe for anything heavier than 1½ tons per axle. On the whole I consider that the	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Date Received	Date.	Miles from Oxford.	Notes and Remarks by District Engineer.	Remarks by Sub-Divisional Officer or Overseers.
			platform, joists and roadway planking should be renewed at an early date, even for carrying ordinary country cart traffic. The bridge at the same time might be allowed to carry loads of 2·5 tons per axle, up to 5 tons on 3 axles, and if wheel tracks and additional beams were laid over the present joists and planking immediately over the piers or abutment beams as per plans to be sent in.	
61	...	42-1		
62	...		One 10 feet semi-circular arch (ring 2½ feet thick), has two very slight cracks running right length of soffit under parapet walls. The cracks are not serious, but to prevent any further disturbance I have ordered 2 tie rods to be fixed from the middle of each wall under the roadway, and these have been securely tightened.	
63	...			
64	...	43-1		
65	...	43-2		
	...	43-3		
	...			
66	...			
	...			
	...	45-1		
67	...	44-2	One 4½ feet flat covered culvert, stone 10 inches thick, in good order.	
68	...	45-4	One 4 feet flat covered culvert, stone 10 inches thick, in good order.	
69	...	45-5	Two 4 feet flat covered culvert, stone 9 inches thick, in good order.	
70	...	45-5	One 6 feet flat covered culvert, stone 9 inches thick, in good order.	
71	...	...	Road surface from Nilumbúr to Kilsháwa in fairly good order with exception of portions of 47th and 49th miles. The whole of the covering material of this section is bad, but the subsoil is fairly good with the exception of the two miles named. These two places should be metalled with broken stone, which can, I believe, be got of a good quality at a quarry some 2½ miles off, or by laying down a plank roadway. Estimate for both will be made out and forwarded shortly.	
72	...	50-6	Iron bridge of one span 96 feet in the clear; all in very good order and up to a load of 3 tons per axle and a load on any one carriage not exceeding 12 tons at the centre of span.	
73	...	51-7	One 4 feet flat culvert, cover stone 9 inches thick, in good order.	
74	...	51-2	One 4 feet flat culvert, cover stone 9 inches thick, in good order.	
75	...	53-3	Two 4 feet covered culvert, stone 9 inches thick, in good order.	
76	...	53-2	One 6 feet covered culvert, stone 5 inches thick, in good order.	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Date Received	Date.	Miles from Oxford.	Notes and Remarks by District Engineer.	Remarks by Sub-Divisional Officer or Overseers.
			many cart traffic, as several of the planks are quite decayed and unsafe; some of them have been broken through. The cross beams or joists are in many cases very badly affected with dry rot: the worst of them have been strengthened by placing new rough jungle-wood joists 6 inches × 4 inches alongside of them. The bridge is now up to loads of 1·5 tons per axle, and anything heavier, say up to but not exceeding 2·5 tons per axle, should be carried on permanent wheel tracks laid down upon the centre of each span to distribute the load over two or more joists. The maximum load of any one carriage to be allowed on this bridge should not exceed 5 tons on two axles.	
67	...	44-2	One 4½ feet flat covered culvert, stone 10 inches thick, in good order.	
68	...	45-4	One 4 feet flat covered culvert, stone 10 inches thick, in good order.	
69	...	45-1	Two 4 feet flat covered culvert, stone 9 inches thick, in good order.	
70	...	45-5	One 6 feet flat covered culvert, stone 9 inches thick, in good order.	
71	...	...	Road surface from Nilumbúr to Kilsháwa in fairly good order with exception of portions of 47th and 49th miles. The whole of the covering material of this section is bad, but the subsoil is fairly good with the exception of the two miles named. These two places should be metalled with broken stone, which can, I believe, be got of a good quality at a quarry some 2½ miles off, or by laying down a plank roadway. Estimate for both will be made out and forwarded shortly.	
72	...	50-6	Iron bridge of one span 96 feet in the clear; all in very good order and up to a load of 3 tons per axle and a load on any one carriage not exceeding 12 tons at the centre of span.	
73	...	51-7	One 4 feet flat culvert, cover stone 9 inches thick, in good order.	
74	...	51-2	One 4 feet flat culvert, cover stone 9 inches thick, in good order.	
75	...	53-3	Two 4 feet covered culvert, stone 9 inches thick, in good order.	
76	...	53-2	One 6 feet covered culvert, stone 5 inches thick, in good order.	

Special Inspection in accordance with instructions of G.O., No. 1192 &c.—cont.

Item Number	Date	Miles from Cuttack.	Notes and Remarks by District Engineer.	Remarks of Sub-divisional Officer or Overseers.
77	...	58-1 via Jaraswith and 57-4 via Marijan.	Ghat road begins.	
78	...		The road between Ekhaiswa and foot of ghat is in very bad order, and the state of last two nights have made it exceedingly heavy. The road has no covering material proper. In some places an attempt has been made to fix a little metal; but owing to the very excessive traffic adopted of laying a single layer of stone is perfectly useless, for the stone is now all on the surrounding to the road surface and the money expended has simply been thrown away.	
79	...	58-4 to 61-6	Ghat road is in very bad condition throughout, the surface is now very much cut up and rutted, while in many places the boulders and broken stones that have been thrown down to form a foundation have worked to the surface. The road is not in a very bad order, but it certainly dangerous and will be very trying to traffic. There are several very narrow lengths of road under 12 feet with that should be widened out. The whole length of ghat up to Bright boundary should be metalled, proper side drains formed and metalled throughout for a full width of 12 feet with proper stone 9 inches thick rolled. The work is carried out it will simply be impossible to maintain the section in anything like good order.	
80	...			
81	...	56-4		
82	...	57-4	One 4 feet wooden culvert; timber all in good order.	
83	...	57-6	One 4 feet wooden culvert, timber all in bad order; must be renewed at once; have ordered Overseer to get the work in hand.	
84	...	58-4	One 4 feet wooden culvert; in good order.	
85	...	58-7	One 4 feet wooden culvert; timbers are rather light for heavy loads that have been going over lately; they have now been supported at centres. The following final abstract appended a little of road prior thereon should be put in hand.	
86	...		One 4 feet wooden culvert; in bad order. Retaining, &c., will be sent in for repairing this at an early date	

Special Inspection in accordance with instructions of G.O., No. 1192, &c.—cont.

Item Number	Date	Miles from Cuttack.	Notes and Remarks by District Engineer.	Remarks of Sub-divisional Officer or Overseers.
87	...	59-4	One 6 feet wooden culvert; timber in bad condition, showing signs of dry rot. Have ordered beams to be supported at centres; estimates will be sent in at an early date for repairing this bridge.	
88	...	60-2	One 6 feet wooden girder; beams in bad condition; must be removed at once and replaced by new ones. Overseer has been instructed to get this done.	
89	...	61-2	One 6 feet wooden culvert; timber showing signs of dry rot. Overseer has been ordered to send in plan and estimate for work required to be done.	
90	...	61-6	A land slip has occurred. The road has been temporarily protected and the Overseer is now engaged collecting material to rebuild revetment 40 feet high and for a length of 15 feet.	
91	...	...	The work required to be done is clearing out the ghat road to an average width of 12 feet would accumulate cutting of about 1½ miles in length, 2 yards wide, and some 3 yards in height.	
92	...	...	The average grade on ghat is about 1 in 15, but there are one or two very steep portions about 1 in 10 and 1 in 12 for very short lengths; these places might be eased by blasting out the rock if it is determined to make this road suitable for heavy and quick traffic. The cost of carrying out this work would be about Rs. 2,000.	

4

(Signed) G. ANDERSON,
District Engineer, Malabar,
Local Fund Department.

Road No. 5, Kandy to Kiriwatte Section—cont.

Date Number.	Date.	Miles from Colvet.	Inspection Notes and Remarks by District Engineer.	Remarks by Sub-divisional Officers or Overseers.
13	...	27-2	One 6 foot arch ring 1½ feet thick, all in good order.	
14	...	27-6	One 6 foot do. do.	
15	...	28-3	One 15 foot do. do.	
16	...	29-7	Two 36 foot arch, in progress. Masonry up to spring and now stopped for revised estimate and plan. Above spring line I think a light girder would save a lot of money and time in finishing this work in lieu of the arch. Plan now in progress.	
17	...	30-4	Two 6 foot arch, ring 1½ feet thick, all in good order.	
18	...	31-1	Two 3 foot do. do.	
19	...	31-4	One 4 foot arch, ring 1½ feet thick, in good order and up to any weight.	
20	...	32-3	One 12 feet arch, semi-circular, ring 1½ feet thick in good order.	
21	...	...	The section from Kandy to Kiriwatte cannot at present be used by traffic coming from Kandy Gate on account of break in the line of communication at 32-3, but even before the bridge was destroyed the heavy through traffic has at all times followed the Maipot route since it was opened. The road crossing of this section is not suitable for carrying a heavy traffic even during dry weather, as it consists for the most part of a very friable and poor class of laterite stone nearly devoid of all binding properties. To alter the present steep gradients into grades suited to quick and heavy traffic, say not exceeding 1 in 20, a new trace and construction of some 3 miles of new road would have to be made. The present road at the worst places—heaviest gradients—is aligned along the side of an abruptly rising hill. This section viâ Avissella is some 3 miles shorter than viâ Maipot, but it is not I think mostly such an important road, and taking into account the additional cost of new bridge at 32-3, the alteration of road grades, and the want of or difficulty in getting good metal covering to carry heavy traffic, I am of opinion that the present route viâ Maipot should be adhered to.	

(Signed) G. ANDERSON.
District Engineer, Malabar,
Local Fund Department.

CALICUT,
19th December 1891.

Estimate No. 1.

Estimate of the probable cost of making certain urgently required repairs and putting ordinary bullock road from Calicut to Nilgiri boundary via the Kankie Ghat

Item Number	Mileage	Particulars	Amount.			Total.		
			Rs.	A.	P.	Rs.	A.	P.
1	...	2½ Miles.—Metalling roadway on the worst portion of road with 9" broken stone and 3" binding 9 cubic inches, including necessary soil cutting forms, at Rs. 4,240 per mile	10,600	0	0			
		1½ Mile earthing.—Cutt 5 × 2 × 3 = 15,840 cubic yards at Re. 1-8	2,376	0	0	12,976	0	0
2	23.0	Culverting 3 feet one inch culvert into 4 feet gutter	30	12	0			
		Cost of rails including carriage and fixing	20	4	0			
		40 cubic feet timber for planking and head rails at Rs. 2-12-0 per cubic foot	107	0	0			
		For removing earth stones and sundries	40	0	0	197	12	0
17.14		Do. 20 feet low arch ... do.						
		Cost of rails including carriage and fixing	43	8	0			
		12 cubic feet timber for planking and head rails at Rs. 2-12-0 per cubic foot	32	4	0			
		For removing earth and sundries	25	0	0	100	12	0
17.4		Do. 1 foot timber platform ... do.						
		Cost of rails including carriage and fixing	70	0	0			
		21 cubic feet timber for planking and head rails at Rs. 2-12-0 per cubic foot	56	0	0			
		For removing old earth and sundries	25	0	0	151	0	0
16.4		Culverting 3 feet timber platform into 4 feet gutter						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			
		Culverting 3 feet ... do.						
		Cost as for culvert 23.0	197	12	0			

Estimate of the probable cost of making certain urgently required repairs, &c.—*cont.*

Item Number	Mileage	Particulars	Amount.			Total.		
			Rs.	A.	P.	Rs.	A.	P.
		Cost of 1 Bogie carriage 115½ cubic feet teak timber at Rs. 3 per cubic foot	346	0	0			
		4 axles with wheels Rs. 50 each	200	0	0			
		Cost of 2	546	0	0			
						1,092	0	0
	38.0	Planks on bridge for wheel track	...					
		Two 100' × 15" × 4" = 250-3 = 83⅓ cubic feet at Rs. 3	250	0	0			
						250	0	0
	38.2	Do. do. ...	...					
		Two 112' × 15" × 4" = 280-3 = 93⅓ at Rs. 3 per cubic foot	280	0	0			
						280	0	0
	43.7	Do. do. ...	...					
		Two 200' × 15" × 4" = 650-3 = 216⅔ cubic feet at Rs. 3	650	0	0			
						650	0	0
		Total ...	...			16,942	0	0
		Add 10 per cent. for Superintendence ...	...			1,698	0	0
		Grand Total ...	...			18,640	0	0

If the Board agree to my proposal to restrict maximum load to 5 tons on one vehicle with load distributed as specified, then the Bogie carriage amounting to Rs. 1,092 should be omitted.

Estimate No. 2.

Estimate of the probable cost of forming and completing Road No. 5 from Calicut to Nilgiri boundary *viâ* Manjeri-Karkûr Ghât as a first-class road having an 18 feet formation and 12 feet width of metalling 9" deep.

Item Number	Mileage	Particulars	Amount.			Total.		
			Rs.	A.	P.	Rs.	A.	P.
1	...	24 *Miles Widening*— 30 × 1,760 × 1 × 1½ = 132,000 cubic yards at As. 2	16,500	0	0			
		14 × 1,760 × 1 × 1½ = 35,200 cubic yards at As. 3	6,930	0	0			
		Side Drains— 30 × 1,760 × ½ × ½ = 6,600 cubic yards at As. 1-8	618	12	0			
		Weir cutting (on new trace)— 6 × 1,760 × 7 × ½ = 36,960 cubic yards at As. 5	6,930	0	0			
		Cost of tracing 6 miles at Rs. 50 per mile ...	300	0	0			
		Sundries at 2 per cent.	621	4	0			
						31,900	0	0

Estimate of the probable cost of forming and completing Road No. 4 from Calicut, &c.—*contd.*

Chain Number.	Reference.	Particulars.	Amount.	Total.
			Rs. A. P.	Rs. A. P.
		64 Miles Metalling finishing with 3" broken stone and 1½ binding 9 yards broad including 10% collecting and clearing side drains at Rs. 3-0-0 each	00 0 0	00 0 0
14		Miles grass and high land at Rs. 4,000 per mile		
20		Miles low swampy at Rs. 5,000 per mile	00,000 0 0	
22		Converting a 2 feet span with culvert into a rail girder—	1,10,000 0 0	2,10,000 0 0
		Cost of rails including carriage and fixing	00 0 0	
		42 cubic feet timber for planking and head rails at Rs. 1-12-0 per cubic foot	00 0 0	
		For removing old work and sundries	00 0 0	
22-2		Converting a 3 feet span &c. &c. Cost as above		270 0 0
			150 0 0	
		Converting 3 feet span &c. &c. Cost as above		270 0 0
			00 0 0	
31-5		Converting 2 feet 6 feet span stone culvert into a rail girder including carriage and fixing	00 0 0	220 0 0
		42 cubic feet timber for planking and head rails at Rs. 1-12-0 per cubic foot	00 0 0	
		For removing old work and sundries	00 0 0	
			220 0 0	
35-6		Converting 10 feet span with culvert into a rail girder—	1,80,000 0 0	2,00,000 0 0
		Cost of rails including carriage and fixing	00 0 0	
		42 cubic feet timber for planking and head rails at Rs. 1-12-0 per cubic foot	00 0 0	
		For removing old work and sundries	00 0 0	
35-4		Converting 12 feet span &c. &c. Cost as above		200 0 0
			200 0 0	
		Converting 14 feet timber platform culvert into a rail girder—		200 0 0
		Cost of rails including carriage and fixing	00 0 0	
		42 cubic feet timber for planking and head rails at Rs. 1-12-0 per cubic foot	00 0 0	
		For removing old work and sundries	00 0 0	
			200 0 0	

Estimate of the probable cost of forming and completing Road No. 5 from Calicut, &c.—*contd.*

Chain Number.	Reference.	Particulars.	Amount.	Total.
			Rs. A. P.	Rs. A. P.
	38-4	Converting 5 vent 21 feet span trestle bridge into single 95 feet vent lattice girder—		
		Cost of girders including carriage to site and erection 26 tons at Rs. 350 per ton	9,100 0 0	
		267½ cubic feet timber for joints and planking at Rs. 1-12-0 per cubic foot	468 2 0	
		For removing old work and sundries	181 14 0	
				9,750 0 0
	39-2	Strengthening a 2 vent 56 feet span girder bridge—		
		By adding a new girder to each existing girder and removing all the cross girders and for planking with 2½" planks 16 tons new girder including carriage to site and erection at Rs. 350 per ton	5,600 0 0	
		300 cubic feet timber for planking at Rs. 1-12-0 cubic foot	525 0 0	
		For removing and altering existing works and sundries	1,075 0 0	
				7,200 0 0
	42-7	Converting a 4 vent bridge timber Howe trusses into a wrought-iron girder Whipple Murphy Type with plank	25,200 0 0	
		7·2 feet girder including carriage to site and erection at Rs. 350 per ton	2,205 8 0	
		1,500 cubic feet timber for planking and joists at Rs. 1-12-0 per cubic foot	214 8 0	
		For removing old work and sundries		27,700 0 0
	55-3	Converting 6 feet stone culvert into rail girder—	120 0 0	
		Cost as for 24		120 0 0
	57-4	Converting 4 feet timber platform do.—	40 0 0	
		Cost of rails including carriage and fixing ...	38 12 0	
		21 cubic feet timber for planking and head rails at Rs. 1-12-0 per cubic foot	13 4 0	90 0 0
		For removing old work and sundries	160 0 0	160 0 0
	58-4	Converting 3 feet do. do. Cost as for 22 nearly	90 0 0	90 0 0
	58-7	Converting 4 feet do. do. Cost as for 57-4 ...	120 0 0	120 0 0
	59-4	Converting 6 feet do. do. Cost as for 55-2 ...	120 0 0	120 0 0
	60-3	Converting 6 feet do. do. Cost as above ...	120 0 0	120 0 0
	61-1	Converting timber platform into a rail girder—		
		Cost as above	75,000 0 0	75,000 0 0
	7-2	Constructing a bridge across the Beypore river at Ferroke Ferry of 5 spans of 100 feet ...		
		Total ...	...	4,12,711 0 0
		Add 15 per cent. for Superintendence ...	...	61,969 0 0
		Grand Total ...	...	4,74,680 0 0

Estimate No. 2, Detail No. 2.

Estimate of the probable cost of putting in proper order for ordinary traffic road from Lackadi to Manantoddy *via* Tirrioto.

Link Number	Particulars.	Rate.	Amount.	Total.
		Rs.	Rs.	Rs.
1	31 miles *metalling roadway* with 9 inches broken stone and 14 inches blinding 4 yards broad including earthwork and clearing side drains at per mile	5,940	1,84,140	1,84,140
2	No. 10 timber bridge 28 feet span per R. foot ...	25	1,450	
3	No. 15 do. 104 feet do. do. ...	25	2,600	
4	No. 29 do. 33 feet do. do. ...	25	825	
5	No. 37 do. 31 feet do. do. ...	25	775	
6	2 culverts each at	300	600	6,250
7	Bridge 200 feet clear waterway at Kulrepuddy Ferry	...	30,000	
8	Bridge 250 feet clear waterway at King's Ferry ...	...	45,000	75,000
	Total ...	...	...	2,65,390
	Add 10 per cent. for Superintendence ...	...	...	26,539
	Grand Total ...	...	...	2,91,920

Abstract Estimate No. 3.

Number	Particulars.	Amount.	Total.
		Rs.	Rs.
1	*Estimate No. 1*—Making certain urgently required repairs to most existing ordinary traffic on road from Calicut to Nilgiri boundary *via* the Karkúr Ghát	18,640	18,640
2	*Estimate of the* probable cost and completing road No. 5 from Calicut to Nilgiri boundary *via* Mangaro and Karkúr Ghát as a first-class road having an 18 feet formation and 12 feet width of metalling 9 inches deep	4,74,620	4,74,620
3	*Estimate of the* probable cost of completing the existing lines of communication between Calicut and North and South Wynaad *via* Tímarasheri Ghát—		
	1st Section, Calicut to Lackadi Section, detailed estimate No. 1	1,86,100	
	2nd Section, Lackadi to Manantoddy *via* Tirriote, No. 2.	1,71,840	
	3rd Section, Lackadi to Chundale *via* Meppádi No. 3 ...	2,91,920	6,49,860
	Calicut and Wynaad Railway.		
4	Estimate of the probable cost of constructing a Railway line of 80 miles in length between Calicut and Devála and a broad line of 40 miles in length between Vayitri and Manantoddy as per estimate No. 4	36,29,185	

Detailed Estimate No. 2 of rolling stock, &c.—*cont.*

Quantity	Description.	Rate.	Amount.	Total.
		Rs. A. P.	Rs. A. P.	Rs. A. P.
12	2nd-class carriage to hold, say, 16 passengers ... ... each	235 0 0	2,820 0 0	
30	3rd do. do. 24 do. ... "	205 0 0	6,150 0 0	
10	Horse-boxes ... ... "	150 0 0	1,500 0 0	
8	Carriage trucks ... ... "	60 0 0	480 0 0	
200	Goods wagons ... ... "	73 0 0	14,600 0 0	
50	Mineral and other high and low sided wagons ... "	53 0 0	2,650 0 0	
30	Cattle wagons ... ... "	80 0 0	2,400 0 0	
25	Break vans ... ... "	165 0 0	4,125 0 0	
	10 per cent. for additional cost of tank wheel and gearing on each of the above engine 18,000 ...	1,800 0 0	1,800 0 0	
	Engine duplicates	...	1,000 0 0	
2	Break down crane 5 tons.... each	500 0 0	900 0 0	
	Engine stores, &c.	...	1,500 0 0	
80	Spare wheels, axles, axle-boxes, &c.	...	1,920 0 0	
100	Do. engines and carriage lamps, &c.	2 10 0	250 0 0	
Tons 700	Freight and insurance	2 10 0	1,750 0 0	68,345 0 0
	Fitting up rolling stock, say, 10 per cent.	...	...	5,634 0 0
	Total ...	...	...	71,979 0 0
	Add for sundries 10 per cent. ...	...	...	7,197 0 0
	Grand Total ...	...	...	79,176 0 0
		...	...	12 0 0
	Grand Total ...	...	...	9,50,112 0 0

CALICUT AND WYNAAD RAILWAYS.

DETAILED ESTIMATE No. 3 for 15 stations with buildings, &c., complete for Calicut and Wynaad Railways, 120 miles.

No.	Particulars.	Rate.	Amount.	Total.
		Rs. A. P.	Rs. A. P.	Rs. A. P.
11	Stations each to have a through siding 300 feet long and an blind do. 150 feet long, or a total of $\frac{1}{4}$ of a mile of road at ...	9,000 12 0	753 0 0	...
4	Stations each to have a through siding 300 feet long and, say, 4 blind sidings each 150 feet long, or a total of $\frac{1}{2}$ of a mile of road at	2,000 6 0	1,510 0 0	...
		214 0 0	12,156 0 0	...
57	Points and crossings at	300 0 0	4,500 0 0	...
15	Wells			
15	Haggus's or Freeman's ejectors for watering engines in lieu of ordinary pump system at	300 0 0	4,500 0 0	...
	Buildings.			
		400 0 0	4,400 0 0	...
11	Goods sheds	700 0 0	2,800 0 0	...
4	Do.	500 0 0	2,500 0 0	...
11	Station-masters' houses	500 0 0	2,000 0 0	...
4	Do. do.	300 0 0	3,300 0 0	...
11	Booking office and waiting-sheds	500 0 0	2,000 0 0	...
4	Do. do.	200 0 0	2,200 0 0	...
11	Latrines	400 0 0	1,600 0 0	...
4	Do.	50 0 0	350 0 0	...
11	Platforms	150 0 0	600 0 0	...
4	Do.			

WYNAAD-CALICUT RAILWAY.

ESTIMATE No. 5.

Locomotive Workshop fittings for 120 miles.

Quantity	Particulars	Rate. £ s. d.	Amount £	Total £
2	Horizontal engines and Cornish boilers, feed pump, and fittings with gun metal working parts	300 0 0	600	
2	3 inch shaftings 10 feet with wall bearings, brackets, &c.	40 0 0	80	
2	16 inch lathes 5 feet centre self-acting screw cutting	150 0 0	300	
1	Do. 4 feet do. do.	75 0 0	75	
2	Radial drilling machine with drills, tools and tables complete	125 0 0	250	
2	Bench drilling machine with fast and loose pulley	20 0 0	40	
2	Stone hammer 8 cwt	125 0 0	250	
2	Screwing machine	50 0 0	100	
2	Tube and bolt screwing machines with cutting off apparatus affixed to large machine up to 2 inch diameter with extra sets of dies complete	35 0 0	70	
2	Do. with adjustable dies up to 1¼ inch diameter with extra sets of dies complete	16 0 0	32	
2	Sets of stocks and dies with wrench threads fitted into case up to 2 inch diameter taper, serpent master tap to each size in each case	27 0 0	54	1,956
2	Right sets of smiths' tools and anvils	10 0 0	20	
2	Do. smiths' fine wrought iron work	20 0 0	40	
2	Do. portable forges	35 0 0	70	
2	Hydraulic presses for wheels setting and shutting	50 0 0	100	
2	Fox smiths' vice	7 0 0	28	
400	Four hundred feet of belting	90 0 0	180	
2	Slotting machine	80 0 0	160	
2	Planing machine	15 0 0	30	
2	Shaping do.			
2	Forwith driving drums and countershaft pipes, &c.	60 0 0	120	
2	Grindstones complete	20 0 0	40	
2	Mills for boring cylinders	160 0 0	320	
2	Sundries	300 0 0	300	1,708
	Total for 30 miles of railway	...	...	3,614
	Total for 120 miles of railway 3,614 × 2½	...	...	9,035
				12
		...	...	108,420

There would be no need of a wheel lathe, as the 16-inch lathe would be sufficient for returning the wheels of maximum diameter, which at present are not to exceed 30 inches diameter.

Design Estimate No. 4 for one mile of road, Wynaad and Calicut Railway, 2 feet 6 inches gauge.

Particulars.	Rate.	Amount.	Total.
	Rs. a. p.	Rs.	Rs.
30 lb. steel rails 47 tons at £7-15-0 at £8-2-8 per ton	82 0 0	4,561	
Fish-plates and bolts 12 tons at £12 per ton	180 0 0	675	
Dog spikes and keep bolts one ton at £18	240 0 0	216	
Cutting up-country.			
Rag for 31 miles Rs. 15 per ton stringing out and fitting together	15 0 0	7,200	
Loading, say, Re. 1 per ton	1 0 0	141	
Freight and insurance	30 0 0	3,414	
Sleepers 8,916 Cyngle-wood, at	1 0 0	3,916	
Total			20,453
	£ s. d.	£	£
One mile of Wood's patent steel sleepers at £5,000 each 56 lb. to the mile 30¼ tons) at	6 2 10	202	
Clip chairs, say, 5 tons at	11 0 0	55	
Freight 37½ tons at	2 10 0	93	
200 + 36 + 66 + 12			4,914
5,000 keys at Rs. 3 per 100			250
Total			5,564

WYNAAD AND CALICUT RAILWAY.

Division Estimate No. 5.

Permanent working expenses for a year.

Number.	Particulars.	Rate per Mensem.	Amount.	Total.
		Rs.	Rs.	Rs.
1	Manager and Chief Engineer at	1,500		
—	Do. travelling allowance at	500	1,000	
1	Locomotive Superintendent	850		
—	Do. travelling allowance	150	300	
1	Resident Engineer	650		
—	Do. travelling allowance	150	300	
1	Chief Accountant	600	600	
	Engineering Subordinate Establishment.			4,150
	Chief Engineer's and Agent Staff Office—			
1	Manager	150	150	
1	Assistant	50	50	
4	Do. Writers	25	92	
1	Storekeeper	50	50	
20	Writers	30	600	
4	Draughtsmen	30	120	
6	Peons	7	42	
	Resident Engineer Staff.			842
1	Inspector	120	200	
4	Sub-Inspectors	60	240	
4	Writers	30	120	
6	Peons	7	42	
1	Cash-keeper	40	40	
60	Mistries Platelayers	7	420	
				1,322
240	Gang	6	1,440	
				1,440

CALICUT-WYNAAD RAILWAY.

DETAILED ESTIMATE No. 16.

Of bridges for various spans. Average height of masonry will be about 18 feet above foundation and will amount to about 150 cubic yards in each bridge.

No.	Particulars.			Rate.	Amount.	Total.
				Rs.	Rs.	Rs.
1	Five feet opening 50 cubic yards at			...	...	
	Girders at			...	...	
	Fitting and erecting			...	...	
2	Ten feet 70 cubic yards at			...	...	
	Girders			...	...	
	Erecting			...	...	
3	Masonry 150 cubic yards at			5	750	
	Fifteen feet span girders £ 30					
	Plain ... ... „ 2		32	... ...	384	
	One and-a-half time timber, say				50	
	Erecting				50	1,234
4	Twenty feet girders £ 40					
	Two time plain „ 4					
	44 × 12				528	
	Masonry				750	
	Timber				60	
	Erecting				60	
5	Thirty feet £ 80					
	Four time girder „ 8					
	88 × 12				1,056	
	Plain timber				100	
	Erecting				150	
	Masonry				750	2,056
6	Forty feet girders £ 140					
	Plain „ 14					
	154 × 12				1,848	
	Seven time timber				100	
	Erecting				200	
	Masonry				700	2,948
7	Fifty feet girder with cross girder £350 + 54 =				4,698	
	104 × 12				250	
	Seventeen time timber				1,000	
	Masonry				510	
	Erecting				...	6,958
8	Sixty feet span cross girder				...	
	Twenty-five time and main girder £500 + 50 =				6,600	
	550 × 12				300	
	Timber				1,000	
	Masonry				750	
	Erecting				...	8,650

No. 46-A.

READ—the following letter from the Secretary of State for India, to His Excellency the Most Honorable the Governor-General of India in Council, dated India office, London, 9th February 1882, No. 6, and Endorsement, by Major G. R. GIBBS, Officiating Assistant Secretary to the Government of India, dated Simla, 7th April 1882:—

From the Proceedings of the Madras Government noted in the margin, which have lately been forwarded to me in connection with the improvement of the roads leading to the Wynaad Gold Fields, on which subject I had occasion to address that Government in my Public Works Despatch, No. 5, of 27th January 1881, I learn that your Excellency's Government has declined to grant a contribution from Imperial Funds towards the maintenance of the road leading from Cotamcoond to Nedoottum in the Wynaad District.

Nos. 299-300, dated 21st February 1881.
No. 498, dated 22nd March 1881.
No. 764, dated 2nd May 1881.
No. 2106 W., dated 5th September 1881, (Public Works Department.)
No. 2821 W., dated 14th November 1881, (Public Works Department.)

2. I also remark that discussions have arisen on the general subject of road communication between the Wynaad and the Western Coast, and if, as may be concluded from the papers forwarded for my consideration, the existing resources of the local and provincial Funds are inadequate to meet the cost of maintaining the roads in a proper state of efficiency, I should wish your Excellency to consider what are the best means of placing and maintaining the main lines of communication in a suitable condition, to provide for the increased traffic that may be expected from the attempts now being made to develop the gold mining industry in the districts in question.

Endorsement, No. 758 C:

Forwarded to the Government of Madras in the Public Works Department, with the request that it may be stated what has been done, or what is now proposed, in the way of improving communications in the Wynaad.

(By Order.)

(Signed) G. R. GIBBS, Major,
Offg. Asst. Secy. to the Govt. of India.

No.

READ—the following Note on the Railway portion of the proposals for opening up Wynaad, embodied in Proceedings of Government, No. 313, dated 1st April 1882, Financial.

The only railway scheme alluded to in these papers is a proposal for a line, on a gauge of 2½ feet, from Calicut to Manantoddy and Devala, *viâ* the Tamarasheri and Perrote Ghâts. Beyond the fact that the cost of the line has been estimated at Rs. 56,22,606, no detail whatever respecting it is given. It is not even stated whether the line has been surveyed, and its assumed length is not known.

2. Two somewhat similar proposals, having for their object the connection of Wynaad with the Western Sea-board by a line of rail, have recently been under the consideration of Government, the first being brought forward by the Wynaad Planters' Association, and the second by Messrs. Burnbills of London. To neither of those proposals was this Government able to accord its unqualified approval.

3. While fully recognising the importance of bringing Wynaad into connection with the railway system of India, it would in my opinion be at present premature to sanction the construction of the line recommended by the Local Fund Board of Malabar.

4. In the first place the proposed gauge of 2½ feet is a mistake. In view of the certainty that any line which may be constructed to link Wynaad with the West

Coast, will ultimately be extended to join existing and proposed lines in Mysore and in the Nilgiri District, there can be no reasonable doubt that the adoption of the metre gauge is obligatory.

5. In the second place there is nothing on record to show that the country has been thoroughly examined, and that the best line has been selected. Looking to the difficulties inseparable from the nature of the tract to be traversed, a thorough examination of all possible routes is essential, before the construction of an expensive line of rail can be undertaken. There are at least six possible routes which a railway between Nanjangud and the coast might take :—

(1) The Karkúr Ghát.
(2) The Thalúr Ghát.
(3) The Tirumakúdal Ghát.
(4) The Yennúr Ghát.
(5) The Kotteth Ghát.
(6) The Penne Ghát.

Of these, the Karkúr Ghát may probably be struck out; partly on account of the large quantity of bridging which would be necessary, and partly because its construction would serve only a limited portion of Wynaad. There remains however a great extent of difficult country to be examined before the best line for a railway can be even approximately fixed.

6. In the third place there is nothing on record to show what may be probable traffic receipts would be in the case of construction. On this point there are some pertinent remarks in the Resolution of the Board of Revenue, paragraphs 11 to 19.

7. After careful consideration, I am of opinion that the right course at present to encourage the extension of the Mysore Railway to Nanjangud, and thence to Wynaad, such as Gundlupet or Gúdalúr, is to commence with the Nanjangud line, in conjunction with the Mysore Railway, and to complete it as far as Gúdalúr, from the terminus of the Mysore Railway at Nanjangud, in accordance with the Madras Railway, a guaranteed line which will serve Wynaad.

8. The Mysore Railway is now open throughout between Bangalore and the town of Mysore, a distance of 84½ miles; and I understand that its extension to Nanjangud, a further distance of 16½ miles, is under consideration.

9. If the probable cost of this extension being sanctioned, there would remain a distance of about 25 miles to be got over, in order to bring Gúdalúr into connection with the Indian Railway System. Taking an average outlay of Rs. 50,000 per mile, the cost of this little extension would probably amount to about Rs. 14,00,000.

10. I am of opinion that, in such manner, the existing legitimate claims of Wynaad in this matter would be fully met, as it would obtain the advantages of railway communication at a minimum of cost. After the line has been opened to Nanjangud, the question of the development of traffic will render it comparatively easy to determine the necessity for further extension, and their direction.

11. In closing this division there is one argument, which from its importance should not be overlooked. A line from Mysore, through Gundlupet to Wynaad, would bring the Wynaad coffee into competition with the Madras Railway, and would thus be also unfavourable to the interests of the Madras Railway, a guaranteed line which has never yet earned its dividend.

Before recommending that the State should incur direct expense in encouraging the construction of a rival line, the necessity for it should, in my opinion, be shown clearly proved.

25th April 1882.

(Signed) J. SHAW STEWART,
Acting Engineer in Mysore.

No. 43-C.

From R. W. BARLOW, Esq., President, Local Fund Board, Nilgiris, to the Chief Engineer, Public Works Department, dated Ootacamund, 22nd May 1882, No. 2.

In reply to your letter, No. 312, dated 17th instant, I have the honor to state that no Local Fund money was spent on the road from Ootacamund to Naduvattam and Gúdalúr during 1879-80, 1880-81 and 1881-82, as stated by the Local Fund Engineer in his letter, No. 186, dated 15th March last. The Engineer seems to have been under the impression that the assignments in the Local Fund Budget for the maintenance of the Circle roads are all Local Fund money. Whereas though the third roads in the district are under the superintendence of the Circle Board, they are maintained by Provincial grants given by Government every year.

2. During 1880-81, owing to the bad state of the road from Ootacamund to Naduvattam, a special Provincial grant of Rs. 20,000 for 1880-81 and 1881-82 was given—*vide* G.O., No. 299, dated 21st February 1881. Under Government Order quoted above a contribution of Rs. 50,000 was contemplated to be provided in the Chinchona Budget for 1881-82, and liabilities have been incurred by the Local Fund Engineer in anticipation of such grant being made. No such grant was however provided in the Chinchona Budget, but a further sum of Rs. 20,000 from Provincial funds was allotted at the close of the past official year for the road in question—*vide* G.O., No. 204, dated 4th February 1882.

3. The following sums were allotted to the road from Ootacamund to Naduvattam and Gúdalúr :—

	Yearly Provincial Grants.	Special Provincial Grants.	Total.
	Rs.	Rs.	Rs.
In 1879-80 ...	6,160	...	6,160
„ 1880-81 ...	3,680	10,000	13,680
„ 1881-82 ...	3,000	30,000	33,000
Total ...	12,830	40,000	52,830

Of which the yearly Provincial grants were spent on the whole line from Ootacamund to Naduvattam and Gúdalúr in each of the above years. The Special Provincial grants, Rs. 40,000, were only for the construction of the portion from Ootacamund to Naduvattam.

4. Rs. 25,878-3-4 were spent on the Naduvattam road from the Special Provincial grants up to the end of 1881-82, thus leaving an opening balance of Rs. 14,121-12-8 available for expenditure in 1882-83.

5. The grant of Rs. 10,000 said by you to have been made in the Public Works Department, quoted in the latter portion of paragraph 1 of your letter, seems to be the grant given in G.O., No. 2221, dated 14th November 1881, for repairing the communications leading to Wynaad Gold Fields. Only a portion of it, Rs. 4,500, was given for the repairs of the roads of this district.

6. The following summary will give you the particulars of the grants available for expenditure, on the road in question, during 1882-83 :—

	Rs.	A.	P.
Available balance of the special grants on the 16 of April 1882	14,121	12	8
A portion of the grant, Rs. 10,000, given for repairing roads	4,500	0	0
Amounts contemplated to be given in paragraph 3 of your letter under reply	64,000	0	0
Total ...	82,621	12	8
Add maintenance grant for 1882-83	3,080	0	0
Grand Total ...	85,701	12	8

No. 41-D.

From R. W. BARLOW, Esq., President, Local Fund Board, Nilgiris, to the Chief Engineer, Public Works Department, dated Ootacamund, 22nd May 1882, No. 2.

In continuation of my No. 2, dated 22nd instant, I have the honor to forward a copy of the Local Fund Engineer's letter, No. 11, dated 21st instant, on the same subject, for your information.

2. The Engineer in paragraph 3 of his letter states that Rs. 4,500 allotted by the Superintending Engineer, Fourth Circle, for the repairs of the communication leading to Wynaad Gold Fields was subsequently withdrawn; but he is not aware that the Circle Board have, on the instigation of the Accountant-General, taken credit for this amount into their accounts from Provincial Funds.

ENCLOSURE.

From J. CHEAPE GOURLEY, Esq., C.E., Local Fund Engineer, Night Dairy, Ootacamund, to the President, Local Fund Board, Nilgiris, dated Ootacamund, 21st May 1882, No. 11.

In reference to your endorsement, dated the 20th instant, on letter No. 117 E., dated the 19th idem, from the Chief Engineer, Public Works Department, to your address, I have the honor to report that the figures given in my letter, No. 105, dated 13th March 1882, do not include the proposed grant of Rs. 4,500 from Circle Funds to [illegible]. These were omitted because I presumed that the Superintending Engineer, Fourth Circle, would withdraw the grant, as I understood it anticipation of this grant, but they have been shown off to the Government in anticipation of this grant, but they have been shown off to the Government in anticipation of this grant, but they have been shown off to the [illegible]

4. The grant of Rs. 11,000 made by the Public Works Department has been [illegible] and referred to at the conclusion of paragraph 1 of the Chief Engineer's letter under reply, it is, I think, the special grant for the repair of the road to the Dimbhatty [illegible] Wynaad Gold and Wynaad and the Nilgiris on Rs. [illegible], based on the position of the Superintending Engineer, Fourth Circle, allotted Rs. 4,500 of the grant to the portion of the road and that it is the latter. This allotment was subsequently withdrawn, there was no portion of it utilized in this manner, and I have received no intimation that it will be available for expenditure in this direct year (1882-83).

5. The figures given in my letter of the 13th March last, No. 105, and referred to in the Chief Engineer's letter under reply, include a Provincial grant of Rs. 4,500 for the different portions of the road by the Public Works Department to [illegible]. This amount should not, I think, be included in grants for completing the formation of the road, and I would suggest that the Rs. 4,500 at the credit of the Local Fund account be transferred to the Provincial Fund account, as the money has been [illegible] for this account into their accounts from Provincial Funds.

[illegible] Department, dated the February 1882, No. [illegible]

	Rs.	A.	P.
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

thus line of communication, and judging from the work done in the first three miles this most certainly is not being done.

11. I would also ask that the question of the advisability of the road from the foot of the Nilgiri Ghát to Ootacamund being placed under charge of this department being considered, I think the whole line from the foot of the ghát to Ootacamund to Gúdalúr and eventually to Devála and Lankáli to the foot of the Tirunilgiris to Gúdalúr and eventually to Devála and Lankáli to the foot of the Tirunilgiris to Gúdalúr and eventually to be a Provincial line under charge of the Department of Public Works, and that this line should be made first class throughout; for this of course extra establishment will hereafter be required, but not much; for the present the road from the foot of the Nilgiri Ghát to Gúdalúr might be taken up for that portion from the foot of the ghát to Ootacamund. At present a large Government grant is given; the cost of this, therefore, if the proceeds of the tolls are taken over with road, would be little or nothing.

No. 14.

Ootacamund—dated 6th June 1882, No. 1416 W., Public Works.

In his memorandum, dated 23rd January 1882, the Chief Engineer submits a comprehensive scheme of communications for the Wynaad, the estimated cost of which, distributed over 5 years, is roughly calculated at 182 lakhs of rupees; and the Consulting Engineer for Railways submits a note, under date the 27th April 1882, on the proposals embodied in G.O., No. 513, dated 1st April 1882 (Financial), for opening up the Wynaad by means of railways.

2. These papers will be recorded, and copies furnished for the information of the Government of India with reference to their endorsement, No. 128 C., dated 10th April 1882, on a despatch* from the Secretary of State, forwarding the best means of placing and maintaining the main lines of communication of this district in a suitable condition, to provide for the demand traffic that may be expected from the attempts now being made to develop the gold mining and planting industries.

3. As regards the proposed railway developments, the Right Honorable the Governor in Council concurs generally in the views of the Consulting Engineer for Railways as to the direction which any new lines should take. There is no prospect of Provincial Funds being in a position to assist the end of the extension of the existing line from Mysore to Gúdalúr, though if the Mysore Government see fit to construct the portion within their own territory, to the frontier near Tippakadi, this Government would be prepared to give the subject their most serious consideration.

4. So far as can be forecasted at present Provincial aid must be restricted to the completion of the Ootacamund, Naduvattam and Gúdalúr road, with eventual extension to the heads of the Karkúr and Tirunelúr Ghats. Fairly large sums have already been granted for this work, and during the current official year large assignments have other been made or promised.

5. It would appear that there is at present available with the Local Fund Board an unexpended balance from previous grants of ... Rs. 14,122
that the Financial Department have assigned from Provincial Funds ... „ 50,000
to the Nilgiri Circle a sum of ... „ 40,000
and that a further contribution of ...
was recently promised by the Public Works Department, making a ... „ 1,04,122
total of ...
for expenditure during the current official year.

6. It is clear from recent correspondence that the Local Fund Agency is inadequate to execute work to this extent. The proposal of the Superintending Engineer, Fourth Circle, that the main line of communication from Metupalayam to Gúdalúr, should be pressed by Government, will therefore be carried into effect at once. The assignment of Rs. 50,000 made to the Financial Department will be reserved for this purpose, and the unexpended balance of Rs. 14,122 in the hands of the Local

* No. 8, Public Works, dated 8th February 1882.

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4. The reconnaissance works recommended by the Improvement Committee require Rs. 3,30,000. The Commissioners, to show that they are not unappreciative of the liberal action of Government, passed a preliminary resolution to the effect that a loan of Rs. 2,00,000 towards this object should be at once applied for. Details as to objects and ways and means will be submitted shortly, the market being a principal object of first.

Extract from Proceedings of a Special Meeting of the Municipal Commissioners of Ootacamund held on the 13th June 1882.

Present:

R. W. Eadow, Esq., *President*.
L. F. Chapman, Esq., *Vice-President*.
W. E. Schmidt, Esq.
W. C. Robels, Esq.
T. Pelichand, Esq.
Gudnalamal Seth.

No. 1. Read G.O., No. 1230 W., dated 19th May 1882, Public Works. The President of the Ootacamund Municipal Commission reported to the Financial Department specific objects connected in G.O. No. 286 W., dated 1st February 1882, to which he would propose to devote the sum of Rs. 75,000 provided for the proposed improvement of Ootacamund. Resolved that (1) Rs. 50,000 of object of the grant be allotted for the drainage scheme. As the Commissioners understand that this sum can be expended by the Department of Public Works in the current year, they make this allotment in confident anticipation that grants will be repeated in future years till the work is carried out. It is observed that the total estimate is Rs. 3,30,000.

" (2) Rs. 10,000 for acquiring Toppa Mudaliar's lines and bungalow and land attached (4 acres).

" (3) Rs. 3,000 for Ford's bungalow and land, about 2 acres.

" (4) Rs. 4,000 for improving and acquiring Pookim Pandi.

" (5) Rs. 3,000 for a portion of Mahomedan Village.

" (6) Rs. 5,000 for minor improvements and planting."

Resolved that the President apply to Government for a loan of two lakhs towards the conservancy works suggested by the Improvement Committee. Details to be settled at next special meeting.

(True Extract.)

(Signed) R. W. EADOW,
President, Ootacamund Municipality.

Order—dated 16th June 1882, No. 208, Financial.

Transferred to the Public Works Department.

(Signed) C. G. MASTER,
Chief Secretary.

No. 12.

Order—dated 3rd July 1882, No. 1667 W., Public Works.

In G.O., No. 1230 W., dated 19th May 1882, a sum of Rs. 75,000 was reserved as an instalment of the grant-in-aid to the Ootacamund Municipality for proposed improvements. The President now submits specific proposals for the utilization of the sum:—

(1) Storm Drainage ... ... Rs. 50,000

2. It is observed, with reference to this, that a very nearly complete scheme for storm (surface) drainage has been received, and has since been remitted to the Superintending Engineer, Fourth Circle, for examination. The probable cost will be about Rs. 90,000. The Superintending Engineer will arrange for the work being put in hand without delay, and, if possible, completed by 15th June. An element of

Rs. 50,000, as proposed by the President of the Municipality, is now made for the work, the money being expended by the Public Works Department.

3. Captain Tulloch's scheme for the great intercepting sewer to convey all sewage clear of the lake has also been remitted to the Superintending Engineer for investigation, together with the secondary schemes for the drainage of Kandal and other localities. The matter should receive early attention.

4. The remaining Rs. 25,000 will be placed at the disposal of the Municipality for the minor improvements indicated by the Commissioners.

5. As regards Toppa Mudaliar's lines and bungalow, the property may be acquired as suggested, but the removal of the habitations will lie over for future consideration.

6. The attention of the President is called to the state of the existing market and handy-stand. As the permanent improvements here contemplated will probably not be carried out for some time, it might be well to pave and drain the sites. Some additional temporary stalls are also much required.

7. The improvement of the ground above the Willow Bund has, it is understood been discussed by the President and the Chief Engineer, and the plan of operations decided on, the Municipality undertaking to reserve a small sum annually in their budget for planting purposes, the trees to be supplied at cost price by the Superintendent of the Botanical Gardens.

8. The Superintending Engineer will, moreover, have early arrangements made for the very gradual lowering of the level of the water in the lake by the reduction of the waste weir in the manner suggested by the Committee—paragraphs 48 to 55 of Report printed with G.O., 1st February 1882, No. 286 W.

9. The clearance of noxious vegetation from public and private grounds should continue to receive attention, and stringent measures taken to enforce the provisions of the existing law.

10. It is considered that measures should be taken for the removal of the dhobies to some suitable site beyond the west end of the lake. The Municipality will be requested to consider how this may best be effected. The President will also arrange for a careful analysis, by the Chemical Examiner, of the drinking water, especially that drawn from wells in the bazaar.

11. The President is at liberty to divert the funds at his disposal to any of the objects of improvement here indicated.

12. The proposed application for a loan of two lakhs will in due course be considered in the Financial Department when formally made with requisite details.

(True Extract.)

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

To the President, Ootacamund Municipal Commission.
" Superintending Engineer, Fourth Circle.
" Examiner of Public Works Accounts.
" Financial Department.

Encl. A. F. Goodall.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [illegible]

PUBLIC WORKS.

Read this Not

Read

G.O., 3rd July 1882, No. 1667

JULY

Nos. 12-13.

Ootacamund.

Improvements in the Town of ... Estimate
for the utilization of the rain of Rs. 75,000
&c., &c.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 12.

Read—the following G.O., dated 19th June 1882, No. 298, Financial :—

Read—the following letter from R. W. BARLOW, Esq., President of the Municipal Commission, Ootacamund, to the Chief Secretary to Government, dated 15th June 1882, No. 150.

In reply to paragraph 5 of G.O., No. 1190 W., dated 10th May 1882, Public Works, I have the honor to forward copy of Resolution No. 1 passed at a Special Meeting of the Municipal Commissioners on the 13th instant, from which it will be observed that the Commissioners proposed to allot the grant of Rs. 75,000 kindly sanctioned by Government as per margin.

	Rs.
(a) Botanic Drainage Scheme	50,000
(b) Acquiring Tuppa Mudaliar's Tea and bungalow	10,000
(c) Acquiring and improving Jacklies Estate	3,000
(d) Acquiring a portion of Mynadicurry and Chantal Villages	7,000
(e) Minor improvement and planting ...	5,000
Total ...	75,000

2. As regards (a), the Secretary to Government in the Public Works Department informed me, at a personal consultation, that Rs. 50,000 could readily be expended during the current year on the Botanic Drainage Scheme under the supervision of his department. This scheme and the water-supply are the two most important points proposed by the Improvement Committee.

3. The allotments under (b), (c), (d), and (e) are, as Government are aware, for removing four of the greatest eye-sores and objectionable occupations in Ootacamund, as well as obstacles to proper sanitation; this, I believe, was especially noticed by the late lamented Governor Mr. Adam.

4. In connection with the small grant (f), I would suggest that the lowering of the lake, as proposed in paragraph 52 of the Improvement Committee's Report, should be carried out at an early date; this will drain all land east of the Willow Bund, and the channel now running to a point north of the ABC Recreation ground, as shewn in the rough sketch enclosed, will have to be continued to drain the reclaimed portion to the arch under the Willow Bund, and, as I calculate, to a point somewhat beyond, which will eventually be the margin of high-water level.

5. Orders have been issued to prevent washing in the lake on the lands situated on the margin, which have come under the control of the Municipality, by G.O., No. 44, dated 5th January 1882, but the Commissioners have intentionally postponed the consideration of the "Hoby" question on the stream running into the lake till the drainage scheme approaches completion, which will probably be the work of several years, for, while the whole sewage of the town runs direct into the lake, it would manifestly be a waste of money to incur any expenditure in transporting the flushes to some point west of the lake. The question will probably require legislation before final disposal.

Rs. 50,000, as proposed by the President of the Municipality, is now made for the work, the money being expended by the Public Works Department.

3. Captain Tulloch's scheme for the great intercepting sewer to convey all sewage clear of the lake has also been remitted to the Superintending Engineer for investigation, together with the secondary schemes for the drainage of Kandal and other localities. The matter should receive early attention.

4. The remaining Rs. 25,000 will be placed at the disposal of the Municipality for the minor improvements indicated by the Commissioners.

5. As regards Teppa Modaliar's lines and bungalow, the property may be acquired as suggested, but the removal of the habitations will lie over for future consideration.

6. The attention of the President is called to the state of the existing market and handy-stand. As the permanent improvements here contemplated will probably not be carried out for some time, it might be well to pave and drain the sites. Some additional temporary stalls are also much required.

7. The improvement of the ground above the Willow Bund has, it is understood been discussed by the President and the Chief Engineer, and the plan of operations decided on, the Municipality undertaking to reserve a small sum annually in their budget for planting purposes, the trees to be supplied at cost price by the Superintendent of the Botanical Gardens.

8. The Superintending Engineer will, moreover, have early arrangements made for the very gradual lowering of the level of the water in the lake by the reduction of the waste weir in the manner suggested by the Committee—paragraphs 48 to 55 of Report printed with G.O., 1st February 1882, No. 286 W.

9. The clearance of noxious vegetation from public and private grounds should receive regular attention, and stringent measures taken to enforce the provisions of the existing law.

10. It is considered that measures should be taken for the removal of the dhobies to some suitable site beyond the west end of the lake. The Municipality will be requested to consider how this may best be effected. The President will also arrange for a careful analysis, by the Chemical Examiner, of the drinking water, especially that drawn from wells in the bazaar.

11. The President is at liberty to divert the funds at his disposal to any of the objects of improvement here indicated.

12. The proposed application for a loan of two lakhs will in due course be considered in the Financial Department when formally made with requisite details.

(True Extract.)

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

To the President, Ootacamund Municipal Commission.
" Superintending Engineer, Fourth Circle.
" Examiner of Public Works Accounts.
" Financial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras

PUBLIC WORKS.

Dated Aug., 82.

Read.

Rec.

G.O., 3rd July 1882, No. 1607 W.

JULY.
Nos. 12-13.

Disposal.

Approximate to the Date of ... Orders
re: the utilization of the sum of Rs. 19,000
&c.—

14TH JULY 1882, No. 1790 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 97.

READ—the following paper :—

No. 240.

Report on Estimates for new Offices for the Registration Department in Coimbatore District.

In G.Os., Nos. 1976 W., dated 10th August 1881, 1176 W., dated 9th May 1881, 2440 W., dated 4th October 1881, 1872 W., dated 29th July 1881, and 2684 W., dated 1st November 1881, plans and estimates were called for ; they are now submitted as follows :—

Six Site Plans.
Eight Abstract Estimates.

		Rs.
Registrar's Office at Coimbatore	... ...	3,920
Sub-Registrar's Office at Avanáshi	... ...	2,120
Do. at Sulyamangalam	... ...	2,120
Do. at Karúr	... ...	2,120
Do. at Bhavání	... ...	2,040
Do. at Kollegál	... ...	2,630

They have been prepared according to the standard plans, &c., circulated in G.O., No. 129 W., dated 14th January 1882, and terraced roofs are provided for it, being considered most suitable to Coimbatore District. The sites have been selected in communication with Sub-Registrars, and are approved of by the Inspector-General. The plans and estimates have been examined in this office and have been approved of. The works would probably take eight months to complete after sanction and allotment of funds. There are no public buildings available at the places where it is proposed to build the new offices except at Bhavání, where the lower rooms of the Bhavání bungalow could, at a cost of Rs. 250, be made suitable for the Sub-Registrar's office. This proposal, however, is not approved of by the Registration Department, who naturally prefer new buildings to be built for their offices.

(Signed) H. R. MEAD, Lieut.-Col., R.E.,
Superintending Engineer, Fourth Circle.

COIMBATORE,
26th June 1882.

No. 98.

ORDER—dated 14th July 1882, No. 1790 W., Public Works.

The undermentioned estimates are sanctioned :—

(1)	Constructing a Registrar's Office at Coimbatore	Rs. 3,920.	Register No. 55 W. of 1882-83.		
(2)	Do. Sub-Registrar's Office at Avanáshi	„ 2,120.	„	„	56 W. „
(3)	Do. do. at Sulyamangalam	„ 2,120.	„	„	57 W. „
(4)	Do. do. at Karúr	„ 2,120.	„	„	58 W. „
(5)	Do. do. at Bhavání	„ 2,040.	„	„	59 W. „
(6)	Do. do. at Kollegál	„ 2,630.	„	„	60 W. „

2. The balance available under the lump sum provision, Budget Item No. 45, for Registration offices, after providing for incomplete works of the last official year, is Rs. 3,947, and funds from this source are appropriated to the extent of Rs. 3,140 for the first three works above mentioned. The remaining works will be executed when funds are available.

3. These sanctions have been registered as Provisional Nos. 13, 14, 17, 18, 20, dis W. of 1902-03 and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle, with twelve Enclosures.
" Examiner of Public Works Accounts, with two duplicate Abstract Estimates.
" Inspector-General of Registration.
" Judicial Department.

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of Madras.

PUBLIC WORKS.

Read July, 1882.

Read

Rec.

G.O., 14th July 1882, No. 1790 W.

JULY.

Nos. 97-98.

Registrar's Office.

Reference for the construction of a set of [illegible] *and Sub-Engineers' offices at certain places, sanctioned.*

22nd JULY 1882, No. 1871 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 151.

Read—the following G.O., dated 12th July 1882, No. 538-N :—

Read—the following letter from W. R. CORNISH, Esq., F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated 5th July 1882, No. G-317 :—

I have the honor to forward the accompanying correspondence from the Surgeon, 2nd District, reporting the fall of one of the sheds of the Women and Children's Hospital, Madras, on the night of the 22nd ultimo, and as the shed forms a very useful portion of the hospital, I beg to request that you will be good enough to obtain the sanction of Government to its being rebuilt as suggested by Dr. Roberts.

Enclosures.

From Surgeon-Major W. H. ROBERTS, M.D., Surgeon, 2nd District, to the Secretary, Surgeon-General with the Government of Madras, dated Madras, 23rd June 1882, No. 83.

I have the honor to report that the heavy squalls last night brought down one of the sheds of this hospital, the semi-pucka one nearest the main buildings. The shed is a complete wreck, walls and roof quite blown down. It was occupied by two European patients at the time, Mrs. Atkinson and Miss Mansell. I am glad to say they were rescued without sustaining any very serious injury, but their lives were in great peril at the time. Mrs. Atkinson was nearly buried alive, and but for the prompt action of Mr. McMahon, would certainly have perished. Mr. McMahon was on the look out at the very moment the shed fell in, and at considerable personal risk rushed into it and pulled Mrs. Atkinson out of bed by the feet. He had hardly done this when the wall fell over on the bed. By this time Civil Apothecary Franklin, Hospital Assistant Syed Maideen, and Nurse Pigil Mrs. Harrison had all come to the rescue and Miss Mansell was safely taken out. Both iron cots on which those patients lay are broken.

All the other sheds have stood the gale, though they were vacated at once for fear of accidents, the patients carried into the main buildings.

The conduct of the hospital staff above mentioned was most praiseworthy and commendable; their work was hard, and not unattended with danger.

I am having the materials of this shed sorted up, and shall be glad to receive orders to rebuild it, as it is a very useful, if not essential, portion of this hospital.

No. 3430.

The Surgeon-General requests to be informed whether this is one of the sheds repaired last year, and what is the estimated cost of rebuilding it.

(By Order.)

(Signed) A. J. STURMER, Surgeon,
Secy., Surgn.-Genl. with the Govt. of Madras.

28th June 1882.

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BUILDINGS AND ROADS
CIVIL WORKS.

Govt of [1882] Madras

PUBLIC WORKS.

Buildings and Roads.

G.O., 22nd July 1882, No. 1871 W.

JULY.

Nos. 131 132.

Women and Children's Hospital,
Madras.

Reconstruction of a shed in the —, accommodate.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 3.

Read—the following letter from Major A. T. FRASER, R.E., Officiating Superintending Engineer, Fourth Circle, to the Chief Engineer, Public Works Department, dated Camp, Ootacamund, 10th March 1882, No. 91 :—

With reference to the concluding paragraph of your memorandum, No. 455 C., dated 18th February 1882, I have the honor to mention that in order to test the practicability of reducing the rates in the case of the estimates for three clerks' cottages and out-offices at Ootacamund, I sent the papers to Messrs Groves, Wait and Co., Coonoor, who have been anxious to take contracts in the Nilgiri District.

One Plan.
Two Detailed Estimates.
Two Abstract do.

2. They write as follows, dated the 1st :—"In returning enclosed the plan and estimates for the proposed clerks' quarters at Ootacamund, we have the honor to express our willingness to undertake the work at the estimated rates, with some slight reductions, as in margin, the aid of machinery enabling us to do so. But as the superstructure will require all bench-made bricks, a very expensive article on these Hills, owing to the dearness of labor and firewood, we do not see how these items could well be reduced, especially as the brick-work will have to be carefully laid, when only pointing is required, so that it may present perfectly even hinder and stickher line.

"We may mention that should these buildings be wanted by the end of the year, some early decision will be necessary, so that arrangements may be made for the preparation of bricks before the approaching rainy season."

3. I have accordingly revised those rates they are able to reduce, and being of opinion, looking to the prevalent cost of labor and materials, the remaining rates cannot be immediately lowered, forward the plan and estimates for sanction.

4. Bricks and tiles are of very inferior quality on the Nilgiris, as well as being high priced.

5. For the clerks' quarters School of Arts tiles have to be brought up from Madras as there is no machinery here to make them.

6. An experienced English brick-maker has just applied for permission to set up a brick and tile factory at Kandal, and if satisfactory terms can be made it is likely that equally good tiles to those made by the Basel Mission at Calicut will be turned out, and well-shaped bricks at a price not exceeding that given for ordinary table-moulded bricks.

7. Better bricks and tiles would admit of more economical building, as the thickness of walls and scantlings of roof could be reduced.

No. 4.

Circular—dated 1st August 1865, No. 1956 W., Public Works.

In G.O., 454 W., dated 15th February 1865, the Government approved of a design submitted by the Consulting Architect for quarters for three married clerks of the Secretariat at Cottacamund, and with his letter, above recorded, the Superintending Engineer, Fourth Circle, submitted an estimate amounting to Rs. 11,314 for constructing the buildings. The rates were considered high, and further explanation was called for by the Chief Engineer in his No. 695 C., dated 22nd March 1865. The estimate is now sanctioned for execution, and an appropriation of Rs. 11,000 is made from the Provincial Reserve.

2. The report already called for on the subject of rates generally should be submitted by the Superintending Engineer.

3. This sanction has been registered as Provincial No. 47 W. of 1865-66, and classed as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle.
" Executive of Public Works Accounts.
" Public Department.

Rail & T. Audit
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BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of (1882) Madras

PUBLIC WORKS.

Dated August, 1st

Read *Read*

G.O. 1st August 1882. No. 1936 W.

AUGUST.

No. 34.

Quarters.

Estimate of Rs. 13,814 for constructing — for Three mounted circles of the Inspector at Cuddapah, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 17.

Read—the following G.O., dated 23rd June 1882, Mis. No. 2000, Revenue :—

Read—the following Proceedings of the Board of Revenue, dated 10th June 1882, Mis. No. 4279 :—

Read—the following letter from J. LEE-WARNER, Esq., Acting Collector of Nellore, to the Secretary to the Board of Revenue, dated 22nd May 1882, No. 2408 :—

In their Order, No. 356, dated the 2nd February 1877, Public Works Department, Government were pleased to sanction an estimate, amounting to Rs. 14,750, for constructing a second-class Cutcherry at Kotah, with a remark that funds were not then available. Though more than five years have elapsed since, no measures appear to have been adopted by the Public Works Department to procure funds and to construct the building.

2. Since the transfer of the Sub-Magistrate's head-quarters to Kotah in 1873 (*vide* G.O., No. 1865, dated 10th December 1873), the office has been held in a private rented building, the only one available in the village. The Sub-Magistrate bitterly complains that he has been put to a great deal of inconvenience from the insecure state of this building; and I have ascertained from inquiries that his complaint is well grounded, and it is difficult, if not impossible, to secure a better building for rent in the village.

3. Under the circumstances above set forth, I request that early means may be found to provide funds for the work.

Resolution—dated 10th June 1882, Mis. No. 4279.

Submitted for the favorable consideration and orders of Government.

(A true Copy and Extract.)

(Signed) E. GIBSON,
Acting Secretary.

To the Secretary to Government, Revenue Department.

Order—dated 23rd June 1882, Mis. No. 2000, Revenue.

Transferred to the Public Works Department.

(Signed) E. F. WEBSTER,
Secretary to Government, R.D.

No. 15.

Circular dated 2nd August 1935, No. 1941 W., Public Works.

The Superintending Engineer, Second Circle, will arrange for paying to land-holders compensation of a second class Cantonment and out-buildings at Kirkee, in the Railway Quarter, mentioned in G.G., No. 2107, dated 2nd November 1917, for which an allowance of Rs. 8,000 is now made from the Provincial Revenue of 1935-36.

(Sd.) [illegible]

(Signed) [illegible] Colonel, R.E.,
Secretary to Govt., P.W.D.

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras

PUBLIC WORKS.

Dated August, 1882.

Read

Read

G.O., 2nd Aug. 1882, No. 1945 W.

AUGUST

Nos. 17-18.

Second class Cutcherry and Out-buildings at Katak in the Nellore District.

Instructions issued for putting in hand the construction of a new and a guard at the Katak cutcherry.

15TH AUGUST 1882, No. 2099 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 103.

READ—the following papers:—

From the Consulting Architect to Government, dated 13th July 1882, No. 289.
Do. do. dated 7th August 1882, No. 364.

No. 104.

ORDER—dated 15th August 1882, No. 2099 W., Public Works.

The plan with estimate, amounting to Rs. 44,962, submitted by the Consulting Architect, for additions and improvements to the Government Secretariat Offices, Stonehouse, Ootacamund, are sanctioned for execution by the Executive Engineer, Nilgiri Division. A sum of Rs. 2,500 for a new road of approach should be added, making a total of Rs. 47,462. An appropriation of Rs. 20,000 for the work is now made from the Provincial Reserve, and the Superintending Engineer will report whether more funds can be devoted satisfactorily to the work in the current official year.

2. This sanction has been registered as Provincial No. 79 W. of 1882-83 and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Consulting Architect to Government.
" Superintending Engineer, Fourth Circle (with two Plans and Estimate).
" Examiner of Public Works Accounts, with duplicate Abstract Estimate.
" Public Department.

Lt. A. F. Goodall.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [illegible] Mains.

PUBLIC WORKS.

Dated August, 1882.

Read

Sent

G.O. 15th Aug. 1882, No. 2099 W

AUGUST.
Nos. 103 104.

Secretariat Offices.

Estimate, amounting to Rs. 41,847, for additions and improvements to the Government House, Ootacamund, and Rs. 2,3[illegible] for a new road of approach mentioned in remarks.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 125.

READ—the following Report of the Committee on Government House, Ootacamund, dated 10th August 1882 :—

The Committee assembled under orders of Government, No. 799 W., dated 24th March 1882, have the honor to submit the following concise record of their conclusions as to the best means of meeting, with every regard for economy, the requirements of Government House at Ootacamund, with a view to the completion of the main building and to rendering the subsidiary ones suitable for the accommodation of His Excellency the Governor's staff and household.

2. With the requirements of so large an establishment it is needless to observe that some of the works necessary are of more immediate importance than others. While therefore recommending the alterations and improvements to the main and subsidiary buildings, as also to the grounds, which they consider essential, the Committee have, in specifying the several works as follows, placed them in order of urgency according to the best of their judgment.

3. As time will be required for working out the several estimates in detail, and as on other grounds it would appear desirable that the early orders of Government should be obtained regarding the general scope of the proposals submitted, the Committee have considered it best at this stage to submit the list with only approximate amounts entered opposite each item, accompanied by an index survey for reference.

4. The letters appended to each heading denote the position of the work on this survey and the figures in the right hand margin the probable sums which the several recommendations will cost if carried out.

WORKS URGENTLY REQUIRED.

Main Building, A.

	Rs.
(1.) Provision of the best and most air-tight description of water closet in lieu of those now in the building, including complete arrangements for the discharge of bath-water, slops, &c., from the different storys	500
(*N.B.*—Alternative arrangements may be considered for the employment of dry conservancy, if so desired, in lieu of the water closets.)	
(2.) Re-arrangement of the windows in the hall and staircase to make them capable of being easily opened for ventilation if necessary (say six swing windows)	300
(3.) Approved swing doors to be placed— (*a*) at top of the back-stairs; (*b*) opening from house to kitchen-yard; (*c*) between the serving and mate's rooms; (*d*) between serving and dining room;	432
(4.) The interior decoration of all the rooms, but chiefly that of the drawing-room	50,000
(5.) Fixing two extra windows in the south wing on east face	300

Bungalow, Q.

This bungalow to be converted into a residence for the Governor's Band Master, and the adjacent gardener's house re-arranged so as to answer as a barrack for 12 men of the Governor's Band	1,250
Total, Urgent Works ...	95,182

WORKS OF LESS URGENCY.

Main Building, A.

The main building externally possesses, owing to its mass, a certain degree of dignity, but from alterations or other causes there is not that unity of design which the Committee think it so important that a public structure should possess, and they recommend that the Consulting Architect be called on to submit for approval four elevations, *i.e.*, one for each face of the building, showing in detail how the exterior is to be finished in every part. These designs after alteration, if necessary, and if eventually approved, to be adopted and strictly adhered to 20,000

House for Cook and Guard Room, D.

Opposite the coachman's house a house, as far as possible similar in design, to be constructed for the French cook, and connected therewith a guard-room, the present guard-room marked thus * on the plan being dismantled. A room to be moreover provided for the supply of hot water to the main building.
Probable cost 11,000

Sapper Lines, now Servants' Houses, E.

With a view to clearing the north side of the building, a matter much required, the existing row of servants' houses (originally Sappers' lines) to be removed entirely and reconstructed with old and new materials near the western range of servants' houses marked ○ on plan, which latter range to be extended as much as may be necessary to accommodate comfortably the servants shown in Captain Reilly's list.
Probable cost 5,000

Approach Road, R.

Instead of approaching the main building from the west or garden face, the present road to be turned south at the point shown on the plan and taken by a new line with uniform and easy gradients so as to approach the building on the south-east side 2,500
N.B.—Advantage may subsequently be taken of this to give a better approach to the Surgeon's house 1,200

Entrance to Stable-yard, C.

A suitable entrance to the stable-yard to be constructed between the coachman's house B and the house for the cook D.
Probable cost 2,000

Stable for Sick Horses, G.

At some convenient spot apart from the general stables two stalls to be constructed for sick horses in order to segregate them from the others.
Probable cost 2,000

Road to Snowdon, S.

The road to Snowdon to be retraced where necessary and completed ... 3,000

Garden Front, T.

The garden front to be laid out as an Italian garden with a fountain in the centre in keeping with the surroundings generally.
Probable cost 6,000

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BUILDINGS AND ROADS
CIVIL WORKS.

Govt of (1882) Madras

PUBLIC WORKS.

Dated August 19th.

Read

Read

G.O. 19th Aug. 1882. No. 2139 W.

AUGUST.

Nos. 126 126.

GOVERNMENT HOUSE, OOTACAMUND.

The Consulting Architect to Government directed to make immediate arrangements for the preparation of detailed estimates for certain urgent improvements in the ——.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads
Civil Works

No. 174.

READ—the following paper :—

From the Consulting Architect to Government, dated 31st August 1882, No. 302.

No. 175.

ORDER—dated 28th August 1882, No. 2202 W., Public Works.

ERRATUM.

In G.O., No. 2099 W., dated 15th August 1882, omit the sentence "A sum of Rs. 2,500 for a new road of approach should be added, making a total of Rs. 47,462." The amount entered on the estimate should be corrected accordingly, the sanctioned amount being left at Rs. 44,962.

(True Extract.)

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

To the Consulting Architect to Government.
" Superintending Engineer, Fourth Circle.
" Examiner of Public Works Accounts.
" Public Department.

Encl. S. T. Aiolin.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated August, 28th.

Read.

Read.

G.O., 28th Aug. 1882, No. 2208 W.

AUGUST
Nos. 174-175.

Erratum.

In G.O., No. 2099 W., dated 15th August 1882.

6TH SEPTEMBER 1882, No. 2291 W., PUBLIC WORKS.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 41.

READ—the following papers:—

From W. R. CORNISH, Esq., F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Secretary to Government, Public Works Department, dated Coonoor, 27th September 1881, No. 0/139.

I have the honor to forward, for the consideration and sanction of Government, estimates for the fencing in of the grounds of the Women and Children's Hospital, Madras, amounting to Rs. 3,020 for a wooden paling, and Rs. 5,525 for a more solid construction in brick and mortar.

2. I need not point out that these premises are at present an eyesore to Madras; that there is no seclusion and privacy as there should be in a female hospital, and that the compound is made a public thoroughfare of. I should recommend the construction of a wall around the ground as proposed by the Superintendent of Works, Presidency.

No. 41-A.

From Colonel H. L. PRENDERGAST, R.E., Superintending Engineer, Fifth Circle, to the Chief Engineer, Public Works Department, dated Chepauk, 15th July 1882, No. 1436.

With reference to your memorandum, No. 2275, dated 7th October 1881, to the Superintendent of Works, Presidency, I have the honor to submit for sanction an estimate of Rs. 6,110 for constructing a compound wall for the hospital for women and children at Chintadrepett.

One Surgeon-General's original letter.
Two Plans.
One Estimate with Report.
" Abstract.

No. 42.

ORDER—dated 6th September 1882, No. 2291 W., Public Works.

The estimate, amounting to Rs. 6,110, for constructing a compound wall for the Women and Children's Hospital at Madras is sanctioned. No funds are at present available.

2. This sanction has been registered as Provincial No. 93 W. of 1882-83, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Fifth Circle, with three endorsements.
" Examiner, Public Works Accounts, with duplicate Abstract Estimate.
" Surgeon-General with the Government of Madras.
" Public Department.

Rod. S. T. Austin.
Spare Copies

BUILDINGS AND ROAD
CIVIL WORKS.

Govt. of 1882 Madras.

PUBLIC WORKS.

Dated September, 1882.

Read

Read

G.O., 6th Sep 1882, No. 2291 W.

SEPTEMBER.

Nos 41-42.

Women and Children's Hospital, Madras.

Estimate amounting to Rs. 6,110 for constructing a compound wall for the — sanctioned with remarks.

V 47
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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 41.

READ—the following :—

No. 283.

Report by the Superintending Engineer, Fourth Circle.

Report on the enclosed Abstract Estimates for constructing three new Sub-Registrar's Offices at the following stations in the West Coast Division :—

3 Abstract Estimates (in duplicate).
3 Site Plans.

		Rs.
I. Beltangudi,	Estimate	2,970
II. Payoli,	do.	2,520
III. Gudalu,	do.	4,833

2. The estimate for the first two works were called for in G.O., Nos. 120 W. and 263 W., dated respectively 17th and 31st January 1881, and for the last in G.O., No. 56 W., dated 9th January 1882. They have been prepared in accordance with the standard design of tiled roof (sheet No. 22, approved of in G.O., No. 120 W., dated 14th January 1882,) to suit the climate. The dimensions of the foundation and basement of the buildings proposed to be constructed at Beltangudi and Payoli have been altered to suit the nature of the soil and slope of the ground.

3. The present inconvenient situation of the Sub-Registrar's Offices at the places above mentioned have been explained by the Inspector-General of Registration in his letters to Chief Secretary to Government, printed in the Government Orders above quoted.

4. The sketch plans of the sites proposed for the erection of the offices are attached, and they have been countersigned by the Inspector-General of Registration in token of his approval. If the estimates are sanctioned and funds allotted in time the works may be carried out by the 30th May.

5. With regard to paragraph 2 of the G.O., No. 2,050, dated 19th August 1881, the delay in submitting the plan and estimate for the construction of the Sub-Registrar's office at Beltangudi is due to the non-receipt of the standard design in time, as also to the selection of the site; the latter was fixed at last by the Collector of South Canara after several references between the Sub-Registrars and Deputy Tahsildar of that station.

COIMBATORE,
19th July 1882.

(Signed) H. R. MEAD, Lieut.-Col., R.E.,
Superintending Engineer, Fourth Circle.

To the Chief Engineer, Public Works Department.

No. 44.

Order—dated 6th September 1882, No. 2292 W., Public Works.

The undermentioned estimates for constructing Sub-Registrar's Offices at the following stations in the Coimbatore and Nilgiri Divisions are sanctioned for execution when funds are available :—

	Amount of Estimate.	Register No.
	Rs.	
(1.) Bellampalli	2,979	No. 16 W. of 1882-83.
(2.) Pykara	5,520	„ 17 W. of „
(3.) Gudalúr	4,633	„ 18 W. of „

2. These sanctions have been registered as Provincial Nos. 16, 17, and 18 W. of 1882-83, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle, with six enclosures.
„ Examiner, Public Works Accounts, with three duplicate Abstract Estimates.
„ Inspector-General of Registration.
„ Political Department.

75

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras.

PUBLIC WORKS.

Dated September, 6th.

Read. *Read.*

G.O., 6th Sep. 1882, No. 2292 W.

SEPTEMBER.

Nos. 43-44.

Sub-Registrar's Offices.

Estimate for constructing — *in certain* stations in the Coimbatore and Nilgiri Districts, sanctioned with remarks.

7TH SEPTEMBER 1882, No. 2229 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 57.

READ—the following papers:—

From Lieutenant-Colonel H. R. MEAD, R.E., Superintending Engineer, Fourth Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 29th July 1882, No. 266.

With reference to paragraph 6 of G.O., No. 1765 W., of 7th July 1882, I have the honor to state that the necessity for construction in the current official year of the District Munsif's Court-houses at Coondapoor and Tellicherry, Item Nos. 42 and 43 of Class B works of the Provincial Budget for 1882-83, is greater as may be seen from the following extracts taken from the District Judge's letters.

2. As regards Item No. 42, the District Judge writes that "The District Munsif's Court-house at Coondapoor is unquestionably the first work necessary to be undertaken in the ensuing official year."

The inconvenience experienced in the present building has often been complained of by the Munsif, and the necessity of taking up the work of construction of the new building was urged so far back as in 1880-81.

3. In respect of Item No. 43, the District Judge writes that "The present Court-house of the Tellicherry District Munsif does not afford requisite accommodation either for the Clerks or Vakils or suitors; the space is so very confined that the establishment has for want of other rooms to do their work in the Court-room itself, which is not only of small dimensions but is always over-crowded by parties, especially during Small Cause Court days. The building is altogether unfit for a Court-house."

4. Under these circumstances I request that funds to the extent of Rs. 5,000 for Item No. 42 and of Rs. 10,000 for Item No. 43 may, if possible, be provided in the current official year.

No. 58A.

G.O., dated 8th August 1882, No. 902 A, Judicial.

Read—the following letter from the Registrar of the High Court of Judicature, Madras, dated 7th August 1882, No. 1566:—

In the Deputy Registrar's letter, dated 3rd instant, No. 1537, Government were requested, for reasons stated, to sanction the construction of a new District Munsif's Court-house at Tellicherry by an early date.

2. The accompanying copy of a telegram requesting the High Court to sanction the renting of a private house for the Tellicherry Munsif's Court, owing to the insecurity of the Court-house building, has just been received; and as the sanction applied for is very urgently required, I am to request that the same may be granted at once, and may be communicated by telegram to the Court.

Copy of Telegram from the District Judge of North Malabar, dated 5th August 1882.

"Tellicherry Munsif's Court unsafe: sanction requested rent hired house twenty-five rupees monthly: please telegraph answer."

No. 595 E.

Referred to the Superintending Engineer, Fourth Circle, for very early report, as to what allotment would be required if the works in question were put in hand during the current official year.

(Signed) ROSS THOMPSON, Lieut.-Col., R.E.,
Ag. Under Secy. to Govt., P.W.D.

15th August, 1882.

No. 57-C.

G.O. dated 16th August 1882, No. 760, Judicial.

Read—the following letter from T. WEIR, Esq., Registrar of the High Court of Judicature, to the Chief Secretary to Government, dated Madras, 3rd August 1882, No. 1537:—

I am directed to forward a copy of a letter from the District Judge of North Malabar, and to invite the attention of Government to the necessity for a new Munsif's Court at Tellicherry being built at an early date. It seems that some correspondence passed between Government and the District Judge on the subject, the result of which was that by G.O., No. 104 W., dated 12th January 1882, (which order however was not communicated to the Court,) Government sanctioned the erection of the Court, the funds for which were to be made available should the necessity of the undertaking be established.

2. The reasons of the District Judge for applying for a Court, which are the present insanitary condition and inconvenient form and site of the building, have already been laid before the Executive Engineer concerned; but hitherto with no result. I am therefore to express the hope of the Court that, for the reasons given by the District Judge, in which the High Court concurs, the necessary funds may be allotted and the work completed as early as possible.

3. The Court also agrees with the District Judge that in view of the proposed introduction of changes in the constitution of the process serving and copying systems throughout the Courts in the Presidency, the best site for the new building would be somewhere in the same compound as that in which the District Court is located, and I am therefore to request that sanction may be accorded to the change in the plan.

ENCLOSURE.

From J. W. REID, Esq., District Judge of North Malabar, to the Registrar, High Court of Judicature, Appellate Side, dated Tellicherry, 21st July 1882, No. 233.

The District Munsif of Tellicherry now holds his Court in a very incommodious building half a mile from this Court.

2. The building is very confined. It is situate on the ranges where detachment of troops encamp. The smell from the mules, elephants and bullocks of the troops is offensive, not to speak of the noise which accompanies the smell.

3. In contemplation of the establishment of a central Nazarat and central office for copyists proposed as the High Court know, it is necessary that the Munsif be located in a building in the same compound as this Court.

4. As early as the 22nd June 1874, by letter of mine, No. 148 to the Acting Chief Secretary to Government, I brought the unsuitability of the building where the Munsif now sits to the notice of Government, and enclose a copy of my letter with which I submitted an approximate estimate.

5. The Government of Madras in their Order No. 1216, dated 3rd July 1874, approved and sanctioned the erection of the new Court-house proposed, but directed that the plan and estimate be revised in the Public Works Department with reference to G.O., dated 26th May 1874, No. 961, Judicial Department.

6. On the 16th January 1875, by my letter No. 19 to the Acting Chief Secretary to Government, I submitted an estimate called for in G.O., No. 961, and another plan and estimate for constructing two sheds for sheltering witnesses coming to the District and Session's Court, the Sub-Court, and the projected Munsif's Court.

7. In Order No. 426, dated 15th February 1875 (Civil Works No. 271), the Government sanctioned the construction of the Munsif's Court-house at a cost of Rs. 9,000, and directed the District Engineer to apply for the necessary funds after 1st April 1875.

8. On the 2nd October 1880, by letter No. 240, to the Acting Chief Secretary to Government, I again brought before Government the necessity of construction of the Munsif's Court, and as the standard plan for Munsif's Courts was revised on the 20th July 1878, suggested the necessity of a fresh estimate being made. In this letter I recommended that the new Court-house be built on the present position, a recommendation which, in view of the newly proposed central Kutcherry and central office for records, I think should not be followed, but my original site to build in this Court's compound should be followed.

9. On 24th December 1880 I countersigned an estimate prepared by the Executive Engineer, West Coast Division, amounting to Rs. 13,200, for the District Munsif's Court proposed.

10. By G.O., No. 1650 W., dated 23rd April 1881, Civil Works, Government sanctioned an estimate for construction of a District Munsif's Court at Tellicherry at a cost of Rs. 12,700.

11. On the 15th February 1882, the Executive Engineer, West Coast Division, informed me that the above work appeared in Class II of the Provincial Budget for 1882-83, and that G.O., No. 104 W., of the 11th January 1882, sanctioning it at a cost of Rs. 13,200 stated that funds will, as far as possible, be made available hereafter should the necessity for undertaking it be established. He therefore requested full information regarding its necessity that he might apply for the requisite funds.

12. To this I replied giving the information on the 20th February 1882.

13. In a letter, dated the 25th June 1882, the Executive Engineer, West Coast Division, informed me that no funds have been allotted for the District Munsif's Court of Tellicherry. I have therefore, in view of the desirability of having the District Munsif's Court in the same compound as this one, for the convenient carrying of the proposed central Kutcherry and office arrangements, the honor to request that the High Court may be pleased to press on Government the necessity of the immediate carrying out the estimate sanctioned for the Munsif's Court.

Order—dated 16th August 1882, No. 2459, Judicial.

Transferred to the Public Works Department for early consideration.

(By Order.)

(Signed) G. B. FORBES,
Acting Under Secretary.

G.O., dated 17th August 1882, No. 1016 (Mis.), *Judicial*.

Read—the following letter from the Registrar of the High Court of Judicature at Madras, Appellate Side, dated 12th August 1882, No. 1419 :—

In continuation of my letter, dated 7th August 1882, No. 1360, I am directed to transmit to Government the accompanying copy of a letter from the District Judge of North Malabar applying for sanction to a monthly rent of Rs. 25 for the accommodation of the Tellicherry District Munsif's Court owing to the insecure condition of the building hitherto occupied by that Court.

In the urgent circumstances of the case, I am again to request the favor of early orders on the subject.

From the District Judge of North Malabar, to the Registrar of the High Court of Judicature, Appellate Side, Madras, dated 8th August 1882, No. 356.

I have to apologize for not acting following up my request of the 5th instant by wire for sanction to hire a house for the Munsif of Tellicherry to hold his Court in, at Rs. 25 per mensem ; but yesterday my orders command and my time was fully occupied.

2. The Munsif's Court consists of a hall in which he sits and of the back and side verandahs where his copyist (appointed and Vakils sit and where his retiring room and records are.

3. The hall is supported by two wooden pillars, one of which has at its base and about a foot of the way up been underbuilt by stone-work. At the base the pillar is empty a shell, but the whole has remained up to-day, as I ascertained by passing the pillar, the [illegible] giving a hollow to the [illegible]

4. The post also seems leaning a little outward, and at the entrance, to the Munsif's room, the wall has cracked, so that the side posts of the door are about three-fourths of an inch out of the perpendicular.

5. Besides this the corner rafter beam which slants downwards at one corner of the building is quite rotten and eaten away by decay and damp, and also two other rafters in the same portion of the roof are rotten.

6. We are having very heavy rains this year, and the roof being loaded with moisture is additionally heavy. Fearing lest some heavy and continued rain might make the faulty pillars and rafters give way, which would, if it occurred in the day time, with the Court full, cause a dreadful catastrophe, I have taken on myself the responsibility of allowing the Munsif to remove his Court and records (yesterday) to a building in the town, which the owner lets us have for the hire, sanction for which I applied, viz., Rs. 25 per mensem.

7. The Munsif has estimated that to replace the faulty pillar and rafters will cost Rs. 71-12-0.

8. I think that it is a pity to waste money on these repairs when, as I hope on the strong reasons I urged in my letter, dated 21st July 1882, No. 233, a new Munsif's Court is about to be built. I only venture to reiterate my recommendations in that letter with still greater force in consequence of the unsafe condition just now discovered of the present Court-house.

9. I enclose a copy of the Munsif's letter bringing the unsafe state of the Court-house to my notice.

10. Your telegram of the 7th arrived this morning.

Order—dated 17th August 1882, No. 1016 (Mis.), Judicial.

The rent will be sanctioned.

2. Copy of the correspondence will be communicated to the Public Works Department in continuation of endorsement, dated 8th August 1882, No. 902 A.

(True Extract.)

(Signed) R. S. LAFFAN,
for Chief Secretary.

No. 57-D.

From Lieutenant-Colonel H. R. MEAD, R.E., *Superintending Engineer, Fourth Circle*, to the Chief Engineer, Public Works Department, dated Coimbatore, 22nd August 1882, No. 349 :—

With reference to your endorsement No. 595 E., dated 18th August 1882, I have the honor to report that the following allotments might with advantage be given for the current year for the works referred to—

	Rs.
District Munsif's Court at Goondapoor Item No. 42, Class B, Budget 1882-83. Estimate Rs. 9,500—proposed grant	5,000
District Munsif's Court at Puttur, Item No. 44, Class B, Budget 1882-83. Estimate Rs. 14,700—proposed grant	7,000

I need not add that if these proposed grants are to be fully utilised this official year it is necessary that they should be given at once.

No. 58.

Order—dated 7th September 1882, No. 2299 W., Public Works.

The liabilities requiring to be met from the balance of Provincial Funds at the disposal of Government do not admit of immediate allotments being made for the works brought forward in the papers above recorded.

2. The demands will however be noted for early grants as soon as funds become available.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle.
" Examiner, Public Works Accounts.
" Political Department.

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BUILDINGS AND ROADS.
CIVIL WORKS.

Gott. of (1882) Madras.

PUBLIC WORKS.

Read September, 7th.

Read. Read.

G.O., 7th Sep. 1882, No. 2299 W.

SEPTEMBER.

Nos. 57-58.

District Munsif's Court Houses.

Stating inability to make allotments from Provincial funds at the disposal of Government for constructing — at certain places, and noting the demands for early grants when funds are available.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 181.

READ—the following letter from Colonel J. BEATTY, R.E., Superintending Engineer, Sixth Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 8th September 1882, No. 503 T.C. :—

With reference to G.O., No. 1176 W. of 9th May 1881, I have the honor to forward herewith for sanction plans and estimates for constructing sub-registry offices at Turaiyúr and Jayankondacholapuram, amounting to Rs. 2,675 and 2,650, respectively, in the Trichinopoly District.

2 Estimates.
2 Duplicate estimates.
2 Plans.
2 Site plans.

2. The estimates have been prepared in accordance with the standard design, sheet No. 22, tiled roofing, circulated with G.O., No. 120 W., dated 14th January 1882, and have been countersigned by the Inspector-General of Registration in token of his approval.

No. 182.

ORDER—dated 22nd September 1882, No. 2466 W., Public Works.

The estimates amounting to Rs. 2,675 and Rs. 2,650, for constructing sub-registrar's offices at Turaiyúr and Jayankondacholapuram in the Trichinopoly District, are sanctioned for execution when funds are available.

2. These sanctions have been registered as Provincial Nos. 115 and 116 W. of 1882-83, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Sixth Circle, with six enclosures.
" Examiner, Public Works Accounts, with two duplicate Abstract Estimates.
" Inspector-General of Registration.
" Judicial Department.

Rad. S. T. Austin.
Spare Copies

CIVIL WORKS.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated September, 22nd.

Read. Read.

G.O., 22nd Sept. 1882, No. 2466 W.

SEPTEMBER.

Nos. 181-182.

Sub-Registrar's Offices,
Trichinopoly District.

Estimates amounting to Rs. 2,475 and Rs. 2,650 for completing — at Turaiyur and Jeyankondacholapuram, sanctioned for execution when funds are available.

4TH OCTOBER 1882, No. 2587 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 18.

READ—the following papers :—

No. 386.

Report to accompany the abstract estimate of Rs. 3,160 for constructing a Sub-Registrar's Office with tiled-roof at Cundapur in the South Canara District, Coimbatore Division.

This estimate was called for in G.O., No. 718 W., dated 18th March 1882; it has been prepared as per printed estimate appertaining to the standard design (sheet No. 22) approved of in G.O., No. 120 W., dated 14th January 1882, with the exception of the foundations, the dimensions of which have been altered to suit the nature of the soil.

One Site Plan.
Two Abstracts.

2. A site has been selected for the erection of the building at south end of the Munsif's Court-house as per enclosed plan with a section of the proposed foundations. This and the abstract estimate have been approved of by the Inspector-General of Registration.

3. The erection of the building is very urgently needed, if the estimate, amounting to Rs. 3,160, is sanctioned and funds allotted at the same time necessary arrangement will be made for early commencement of the work, which may be completed within eight months from the date of putting it in hand.

Rs. 2,000 might be allotted this official year, 1882-83, and the balance, Rs. 1,160, in 1883-84.

COIMBATORE,
9th September 1882.

(Signed) H. R. MEAD, Lieut.-Col., R.E.,
Superintending Engineer, Fourth Circle.

To the Chief Engineer, Public Works Department.

No. 19-A.

From Lieutenant-Colonel H. R. MEAD, R.E., Superintending Engineer, Fourth Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 26th September 1882, No. 404.

With reference to your memorandum No. 1703 C., dated 21st September 1882, I have the honor to return the estimate and to report that I do not consider it advisable to reduce any of the rates of the estimate for the Sub-Registrar's office at Cundapur. The high rate for masonry is in consequence of the distance the laterite stone have to be brought, no good quarry being near the work. I consider that some ceiling is a necessity where mission tiles are used and bamboo mats form a cheap and good one. With regard to petty supervision Cundapur is far away from the head-quarters and the sub-division and 5 per cent. does not appear a heavy charge.

One Abstract Estimate.
One Site Plan.

No. 20.

Orders—dated 4th October 1882, No. 2547 W., Public Works.

The estimate amounting to Rs. 3,180, for constructing a Sub-Registrar's office at Cuddapah in the South Canara District, is sanctioned for execution when funds are available.

2. This sanction has been registered as Provincial No. 123 W. of 1882-83, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, Fourth Circle, with two enclosures.
" Examiner, Public Works Accounts.
" Accountant-General of Irrigation.
" Political Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1882] Madras

PUBLIC WORKS.

Dated October, 4th.

Read. Read.

G.O., 4th Oct. 1882, No. 2587 W.

OCTOBER.

Nos. 19-20.

Sub-Registrar's office at Cundapur.

Estimate amounting to Rs. 2,160 for [illegible] sanctioned —, South Canara District [illegible] Dated.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 27.

LETTER—from

COLONEL R. H. SANKEY, R.E., C.B.,

Secretary to Government, Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

SIR,

I am directed to forward, with reference to paragraph 4 of your letter No. 1082 G., dated 24th July 1882, a statement of the establishment which, in the opinion of this Government, is absolutely necessary to carry out the Productive Public Works in the Godávari, Kistna, and Cauvery Deltas which have lately been sanctioned.

2. On the general question of the supposed extravagance of the sanctioned scale of establishment in this Presidency, a separate communication will shortly be made, and I am to add that this Government fully accept the condition made in your letter under reply, that the establishment required to carry out the work now referred to is to be temporary; but it is, in the opinion of this Government, essential that the Executive Engineers, to whom the new temporary divisions are to be entrusted, shall be officers acquainted with the mode of carrying out work, and the workmen employed, in this Presidency.

3. The arrangements which are therefore proposed and to which I am directed to request the approval of the Government of India are as follows:—

(1.) The appointment of the following officers as temporary Executive Engineers:—

Mr. Wilks, at present temporary Executive Engineer on the Kurnool Canal.

Mr. H. S. Taylor, Assistant Engineer, First Grade, and Acting Executive Engineer, Fourth Grade.

Lieutenant W. L. C. Baddeley, R.E., Assistant Engineer.

(2.) The appointment of three Assistant Engineers by transfer from other Provinces.

(3.) The appointment of three Accountants, who, it is understood, the Government of India agree with this Government in considering should be graded on the permanent staff and would be the only addition proposed to that staff.

The other appointments proposed in the statement enclosed being below the limit of pay which has been fixed as requiring the sanction of the Government of India, can be made by this Government, it is anticipated, from among the qualified Upper Subordinates in this Presidency.

4. As regards the appointments of Executive Engineers proposed, Mr. Wilks is an officer of many years standing on the late Madras Irrigation and Canal Company's works, and in the proposals submitted for the taking over the Company's works it has already * been suggested that his services should be retained; the other officers named are selected Assistant Engineers who have, in the opinion of this Government, shown themselves fit for the position in which it is proposed to place them.

* Letter No. 1449 W., dated 10th June 1882.

5. On the subject of the appointment of temporary Assistant Engineers from other Provinces, I am to say that this Government will now be prepared to accept such officers as the Government of India may consider fully qualified for the work and have been well reported on during their previous service. It is presumed that in all such cases of transfer copies of the usual confidential reports shall be forwarded to this Government at the earliest practicable date.

I have the honor to be,

Sir,

Your most obedient servant,

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

Fort St. George,
4th October 1882.

Appendix to letter No. 2592 W., dated 4th October 1882.

STATEMENT showing the proposed changes in the Establishment of the Public Works Department, Madras Presidency.

Present Strength.			Proposed Strength.			Increase.			Decrease.			Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.		Number.	Amount of Pay.		
		Rs.			Rs. a. p.		Rs. a. p.			Rs.		
				General Ordinary Division.								
			1	Executive Engineer, 2nd grade.	500 0 0	1	600 0 0					
			1	Assistant Engineer, 2nd grade.	250 0 0	1	250 0 0					
			1	Sub-Engineer, 2nd grade.	150 0 0	1	150 0 0					
			1	Draftsman	100 0 0	1	100 0 0					
				Office Establishment.								
			1	Clerk, 1st class, 2nd grade.	75 0 0	1	75 0 0					
			1	Do. 2nd do. 2nd do.	60 0 0	1	60 0 0					
			1	Do. 3rd do. 2nd do.	50 0 0	1	50 0 0					
			1	Do. 4th do. 2nd do.	40 0 0	1	40 0 0					
			1	Draftsmen, 1st class	60 0 0	1	60 0 0					
			1	Do. 2nd do.	50 0 0	1	50 0 0					
			1	Messengers	30 0 0	1	30 0 0					
			1	Do.	25 0 0	1	25 0 0					
			1	Accountant, 4th grade	110 0 0	1	110 0 0					
				Sub-divisional Office Establishment.								
			2	Clerks, 4th class, 2nd grade	50 0 0	2	50 0 0					
			2	Messengers	30 0 0	2	30 0 0					
				Overseers' Clerks.								
			3	Clerks, 4th class, 1st grade	35 0 0	3	105 0 0					
				Petty Establishment.								
			3	Messengers	30 0 0	3	90 0 0					
			3	Lascars	30 0 0	3	90 0 0					
				Total	2,214 0 0		2,214 0 0					
				General Works Division.								
			1	Executive Engineer, 4th grade.	350 0 0	1	350 0 0					
			1	Assistant Engineer, 1st grade.	200 0 0	1	200 0 0					
			2	Sub-Engineer, 2nd grade.	250 0 0	2	500 0 0					
			2	Draftsmen	150 0 0	2	300 0 0					
				Office Establishment.								
			1	Clerk, 3rd class, 2nd grade	75 0 0	1	75 0 0					
			1	Do. 4th do. 2nd do.	60 0 0	1	60 0 0					
			1	Do. 4th do. 2nd do.	50 0 0	1	50 0 0					
			1	Draftsmen, 1st class	60 0 0	1	60 0 0					
			1	Do. 2nd do.	50 0 0	1	50 0 0					
			1	Messengers	30 0 0	1	30 0 0					
			1	Do.	25 0 0	1	25 0 0					
			1	Accountant, 4th grade	110 0 0	1	110 0 0					
				Sub-divisional Office Establishment.								
			2	Clerks, 4th class, 1st grade	35 0 0	2	70 0 0					
			2	Messengers	30 0 0	2	60 0 0					
				Overseers' Clerks.								
			3	Clerks, 4th class, 1st grade	35 0 0	3	105 0 0					
				Petty Establishment.								
			3	Messengers	30 0 0	3	90 0 0					
			3	Lascars	30 0 0	3	90 0 0					
				Total	1,665 0 0		1,665 0 0					

Statement showing the proposed changes in the Establishment of the Public Works Department, Madras Presidency—cont.

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of Proposition.
Number.	Designation.	Pay.	Number.	Designation.	Pay.	Number.	Pay.	Number.	Pay.	
		Rs.			Rs. a. p.		Rs.		Rs.	
				Quarry and Forest Inspection Division.						
			1	Executive Engineer, 4th grade	600 0 0					
			1	Sub-Engineer, 3rd grade	250 0 0	1	250 0 0			
			2	Overseers	120 0 0	1	120 0 0			
					100 0 0	1	100 0 0			
				Office Establishment.						
1	Clerk, 2nd class, 3rd grade	75	1	Do. 4th Rs. 3rd do.	75 0 0					
1	Do. 4th Rs. 3rd do.	55	1	Do. 4th Rs. 2nd do.	55 0 0	1	75 0 0			
1	Do. 4th Rs. 2nd do.	44	1	Do. 4th Rs. 1st do.	44 0 0	1	55 0 0			
1	Draftsman, 1st Class	40	1	Do. 3rd do.	40 0 0	1	44 0 0			
1	Do. 2nd do.	35	1	Do. 2nd do.	35 0 0	1	40 0 0			
1	Manager	35	1	Do. 1st do.	35 0 0	1	35 0 0			
1	Do.	30	1	Manager	30 0 0	1	35 0 0			
1	Accountant, 4th grade	7	1	Do.	7 0 0	1	30 0 0			
1	Overseer Khalsa	5	1	Accountant, 4th grade	5 0 0	1	7 0 0			
		111	1	Overseer Khalsa	5 0 0	1	5 0 0			
		40	3		111 0 0	1	111 0 0			
					40 0 0	3	40 0 0			
				Petty Establishment.						
1	Storekeeper	25	1	Storekeeper	25 0 0	1	25 0 0			
1	Lascars	10	1	Lascars	10 0 0	1	10 0 0			
	Total	1,455		Total	1,455 0 0		1,455 0 0			
	Grand Total	1,455		Grand Total	1,455 0 0		1,455 0 0			

(Signed) L. H. SAUNDERS, Colonel R.E.,
Secretary to Government, P. W. D.

GENERAL
ESTABLISHMENT.

Govt. of [1882] Madras.

PUBLIC WORKS.

Posted October, 69.

Read. *Read.*

4th Oct. 1882. No. 2592 W.

OCTOBER.
No. 27.

Productive Public Works in the Godavari, Kistna, and Cauvery Deltas.

Establishment necessary to carry out the —.

No. 381 A—G.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.
General.

To

The Governments of Madras, Bombay, Bengal, the North Western Provinces and Oude, and the Punjab, in the Public Works Department.

The Chief Commissioners, Central Provinces, British Burma, Assam and Coorg.

The Resident at Hyderabad.

The Resident at Mysore (through Foreign Department).

The Agents to the Governor General for Central India, Rajputana and Beluchistan.

The Superintendent of Port Blair and Chief Commissioner, Andaman and Nicobar Islands.

The Director General of Telegraphs.

The Inspector General of Military Works.

The Accountant General, Public Works Department.

The Director General of Railways.

The Director-in-Chief, Indo-European Telegraph.

The Director, Persian Telegraph.

The Deputy Director, Persian Gulf Telegraph.

The Consulting Engineers to the Government of India for Guaranteed Railways, Calcutta, Lahore and Lucknow.

The Controller General.

The Accountant General, Bengal.

Fort William, November 30, 1882.

Sir,

I am directed to forward herewith copy of a Despatch from the Secretary of State, No. 48, dated 7th September 1882, with enclosures, commenting on the very high charges for Establishment as shown in the Public Works Department Budget Estimates and accounts, and to request that the Budget Estimate of 1883-84 may be accompanied by statements showing the true or approximate percentage which the charges for Establishment bear to the expenditure on works in connection with which it is employed. If the expenditure does not supply a proper criterion of the actual economy exercised in controlling the Establishment charges, detailed explanation should be submitted of the causes of all charges in excess of the fair normal expenditure on the supervision of direct outlay on works.

2. The statements should be prepared for the actual transactions of the year 1881-82, and the estimates of 1882-83 and 1883-84 for the Buildings and Roads and Irrigation Branches of the Department, and the explanations called for should be submitted for each year.

I have the honor to be,

Sir,

Your most obedient Servant,

A. J. FILGATE, Lieut.-Col., R. E.,

Deputy Secy. to the Govt. of India.

Copy forwarded to the Military Department, with a request that the information may be furnished by the Inspector General of Military Works.

A. J. FILGATE, Lieut.-Col., R. E.,

Deputy Secy. to the Govt. of India.

Documents accompanying

Despatch from the Secretary of State, No. 48,

dated 7th September 1882, with enclosures.

Enclosures to P. W. D. Resolution No. 381 A—G of 1882.

No. 48, dated 7th September 1882.

From—The Secretary of State for India,

To—The Government of India.

The very high charge which, from the figures in the Public Works Budget Estimates or Accounts, appears in many cases to be incurred on establishments relatively to the work, whether on original undertakings or repairs, for which that establishment is maintained, has frequently attracted notice, and has led to inquiries by my predecessors in office and myself.

2. The accompanying statements, compiled from the Accounts for 1880-81, will illustrate my meaning. It will be seen that the percentage of establishment to outlay is—

For Madras Provincial Works	...	59
„ „ Productive „	...	42
„ Bombay Provincial „	...	55
„ „ Irrigation and Agricultural Works	...	59
„ Bengal Productive (Irrigation) Works	...	40
„ North West Provinces Imperial Works	...	110
„ „ „ Irrigation and Agricultural Works	...	86
„ „ „ Productive Irrigation Works	...	59½
„ Punjab Irrigation and Agricultural Works	...	72

3. The explanation of the very high rates in these cases, doubtless, is that the establishment of which the cost is set down is not supervising only the outlay against which it is charged, but is employed on other duties, among which may be named the administrative duties connected with the irrigation revenue.

4. I request that your Government will consider the possibility of exhibiting in a statement, which should be annexed to the Budget Estimates and included in the Accounts, the true or approximate percentage which the establishment bears to the expenditure on works in connection with which it is employed; and, if that expenditure does not supply a proper criterion of the actual economy exercised in controlling the establishment charges, that some appropriate explanation should be afforded of the causes of charges in excess of what may be ascertained to be the fair normal expenditure for the supervision of direct outlay on works.

Madras Public Works, 1880-81.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.
		£	£	£	£	
Imperial —	Military — —	34,000	27,741	61,741	9,891	
	Civil Buildings — —	11,301	302	11,603	6,240	
	Miscellaneous Public Improvements — —	71,502	70	71,572		
	Barrack — —	—	—	—	—	
				144,916	16,131	12·42
Provincial —	Civil Buildings — —	46,405	6,261	52,666		
	Communications — —	27,332	5,254	32,586		
	Miscellaneous Public Improvements — —	11,679	324	12,003		
				97,254	11,165	11·48
Interprovincial Local Funds.	Civil Buildings —	324	40	364		
	Communications —	3,324	13,792	17,116		
	Miscellaneous Public Improvements —	34	302	336		
				17,816	1,633	9·16
Irrigation and Navigation Works, Ordinary.	Capital Accounts —	63,754		63,754	13,200	
	Ditto ditto —	11,784		11,784	1,142	
	Revenue Accounts —	1,097	4,312	5,409	5,269	
	Ditto ditto —	—	11,916	11,916	3,074	
Agricultural Works —	Ditto ditto —	13,569	16,354	29,923	11,305	
	Ditto ditto —	6,316	11,031	17,347	6,947	
				140,443	40,937	29·16
Productive Works —	Irrigation, Revenue —	9,091	42,242	51,333	24,014	
	" Capital —	12,072	—	12,072	3,691	
				63,405	27,705	43·69
	Total —	—	—	863,774	147,571	17·09

Bombay Public Works, 1880-81.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.
		£	£	£	£	
Imperial —	Military — —	44,664	44,528	89,202	27,610	
	Civil Buildings — —	11,782	3,382	15,164	7,670	
	Miscellaneous Public Improvements — —	10,500	1,635	12,234		
	Barrack — —	—	7,100	7,100	8,917	
				123,700	44,197	35·03
Provincial —	Civil Buildings — —	58,207	25,152	73,360		
	Communications — —	17,242	91,355	108,224		
	Miscellaneous Public Improvements — —	1,462	2,713	3,805		
				178,389	65,539	35·09
Interprovincial Local Funds.	Civil Buildings —	9,077	5,830	14,907		
	Communications —	27,269	69,253	126,622		
	Miscellaneous Public Improvements — —	16,903	6,743	23,646		
				165,175	18,980	11·50
Irrigation and Navigation Works, Ordinary.	Capital Accounts — —	50,586	114	50,600	14,066	
	Revenue Accounts — —	1,301	25,326	26,427	7,947	
	Ditto ditto —	6,519	43,600	50,119	23,013	
		2,822	4,641	7,463	7,444	
Agricultural Works —	— —			134,609	52,470	38·98
Productive Works —	Irrigation, Revenue —	213	13,832	14,045	6,746	
	" Capital —	9,507	—	9,507	—3,927	
				23,552	2,819	
	Total —	—	—	625,515	180,574	28·41

Note.—The above statement omits the outlay on the Dhond and Manmad Railway (in Account No. 4, in which no Establishment costing 5,297*l.* is shown against a net receipt of 37,888*l.* on Construction), as the amount is not included in the total charge for Establishment in Account No. 49, which excludes Railways. It also omits a charge of 9,702*l.* for Establishment debited to "Contribution, Local Funds, Deposits, &c.," as no explanation is given of the work superintended.

Bengal Public Works, 1880-81.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.
		£	£	£	£	
Imperial	Military	795	3,740	4,675	861	
	Civil Buildings	46,244	11,233	57,477	5,307	
	Miscellaneous Public Improvements	229	225	454		
	Buruah	...	...	...	...	
				62,606	6,168	14·89
Provincial	Civil Buildings	147,744	31,843	179,587		
	Communications	130,352	65,646	195,998		
	Miscellaneous Public Improvements	3,316	3,777	7,093		
				382,678	84,169	22·16
Incorporated Local Funds.	Civil Buildings	...	...	...		
	Communications	1,319	...	1,319		
	Miscellaneous Public Improvements	...	...	...		
				1,319	195	14·78
Irrigation and Navigation Works, Ordinary.	Capital Accounts	20,852	...	20,852	7,407	
	Revenue Accounts	43,000	33,500	76,500	13,000	
	Bihar Rihar	3,405	21,347	24,752	3,402	
	Orissa Rihar	1,477	...	1,477	147	
				143,581	25,956	18·08
Productive Works	Irrigation, Revenue	100	62,000	62,100	10,250	
	Capital	113,375	...	113,375	16,000	
				175,740	26,250	14·93
	Total	...	...	764,324	137,208	17·95

North-Western Provinces and Oudh Public Works, 1880-81.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.
		£	£	£	£	
Imperial	Military	5,065	1,080	6,095	992	
	Civil Buildings	8,950	5,271	14,221	20,504	
	Miscellaneous Public Improvements	...	...	...		
	Buruah	...	21	21	4	
				20,337	21,505	110·23
Provincial	Civil Buildings	62,661	34,658	97,319		
	Communications	23,240	87,837	111,077		
	Miscellaneous Public Improvements	1,320	...	1,320		
				209,716	67,770	27·60
Incorporated Local Funds.	Civil Buildings	...	...	...		
	Communications	21,275	77,228	101,503		
	Miscellaneous Public Improvements	1,035	1,958	2,993		
				104,320	29,112	27·90
Irrigation and Navigation Works, Ordinary.	Capital Accounts	6,854	...	6,854	2,501	
	Revenue Accounts	2,473	12,355	14,828	17,052	
	Bihar Rihar	1,335	792	2,127	686	
	Orissa Rihar	265	301	566	300	
				24,467	20,989	85·78
Productive Works	Irrigation, Revenue	9,445	65,551	75,296	45,020	
	Capital	178,929	...	178,929	34,859	
				254,225	100,455	39·51
	Total	...	...	611,066	239,837	37·64

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.
		£	£	£	£	
Imperial	Military	13,391	13,858	27,274	6,762	
	Civil Buildings	30,316	4,843	35,159	7,626	
	Miscellaneous Public Improvements	11		11		
	Barrack		1,109	1,109	326	
				64,754	14,564	20·61
Provincial	Civil Buildings	27,659	23,183	50,790		
	Communications	14,911	56,554	71,565		
	Miscellaneous Public Improvements	523	3,946	4,469		
				126,827	44,119	29·95
Incorporated Local Funds.	Civil Buildings	2,627	2,442	5,069		
	Communications	16,440	37,559	47,902		
	Miscellaneous Public Improvements	4,040	1,401	5,441		
				58,412	6,371	13·57
Irrigation and Navigation Works, Ordinary.	Capital Accounts	13,753		13,753	4,681	
	Revenue Accounts	659	16,711	17,370	12,201	
Agricultural Works	Dittos charged		32	32	6,000	
	Dittos credited	194		194	265	
				31,351	23,154	73·87
Productive Works	Irrigation, Revenue	5,261	37,454	42,715	44,000	
	Capital	297,000		297,000	27,240	
				339,715	111,161	32·72
	Total			631,059	179,369	28·37

Rs. 975, P. W. D. Press.—10-11-32.—325.

T&P
90

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.
General.

To

No. 382 A—G.

Dated November 30, 1882.

Received

Order thereon No 3324 W
dy 15 Dec/82.

Communicate to the Secretary, P.W. Accts who will prepare the required statement of per centages and submit them through the Chief Engineer, P.W. Department.
(Tracing retained)
Sd/ G.C. Rawson Capt R.E.
Ag Under Secy to Govt,
P.W. Dept.

Forwards copy of a Despatch from the Secretary of State commenting on the very high charges for Establishment as shown in the Public Works Department Budget-Estimates and accounts, and requests that the Budget-Estimate of 1883-84 may be accompanied by statements showing the true or approximate percentage which the charges for Establishment bear to the expenditure on works in connection with which it is employed.

34. 376, P. W. S. Press—30-11-82—225.

To the Secretary P.W. Dept
& Chief Engineer for Info

B No 3324 Transfer Deposit

91

APPENDIX A.

OOTACAMUND WATER-SUPPLY PROJECT.

THE MARLIMUND RESERVOIR.

The present catchment area is 268 acres, of which 188·65 acres are to be cut off and 79·35 acres retained as follows :—

Owner of Land.	Area.	Area to be cut off.	Area to be retained.	——
	ACRES.			
General Baker	189·69	186·23	3·46	
Mr. Freud	7·02	2·42	4·60	
„ Wapshare	47·73	...	47·73	Uncultivated.
Total, Private lands ...	244·44	188·65	55·79	
Government waste	23·56	...	23·56	
Total ...	268·00	188·65	79·35	

The area that can be added north of reservoir is 35 acres, as follows :—

Private land (Mr. Taylor's)	8
Government waste	27
Total ...	35·00

and on the south of reservoir 53·42 acres, as follows :—

Private lands—	
Mr. Freud	13·27
„ Cowdell	5·0
„ Griffiths	5·15
Total, Private ...	23·42
Government waste ...	30·00
Total ...	53·42
Total, area available west of Snowdon Saddle ...	167·77

The probable cost of securing the retained and added area will be—

	Rs.
Retained area, private land, 55·79 acres at Rs. 100	5,579
Added on north side do., 8 at „ 50	400
Do. on south side do., 23·42 at „ 100	2,342
Total, compensation for land 86·21 acres ...	8,321

The cost of diverting the drainage of the area cut off will be—

One mile of channel	500
Culvert under Marlimund road	1,000
Total ...	1,500
Total for compensation and works ...	9,821

or say Rs. 10,000.

The catchment area of 167·77 acres set apart as above for the sole use of the reservoir can be supplemented to any extent up to from 500 to 600 acres on the Snowdon Hill, of which about 10 acres value about Rs. 1,000 is private property.

The cost of conveying this drainage will be approximately as follows :—

	Rs.
Catch drain round Snowdon Hill	1,600
One thousand feet of 24-inch main pipe along Snowdon Saddle ...	15,840
Cisterns at head and mouth of pipe 1,200 each	3,000
Channel from saddle to reservoir 500, superpassages of road drainage 500, inlets for hill drainage 500, culvert under Marlimund road 750	2,250
Compensation for land on Snowdon Hill	2,250
Do. do. in course of channel to reservoir	1,000
And for the removal of huts above proposed line of channel ...	500
Total ...	26,750
Add for compensation and work on Marlimund side as detailed above	16,000
Total cost of project ...	42,750

It must be observed that the 24-inch main pipe along Snowdon Saddle is calculated to carry the drainage of only 300 acres of the catchment area available on the Snowdon Hill, and more than this it not likely to be required for very many years to come. Should it be necessary to increase the supply from the Snowdon catchment area at any future time, another pipe of the required dimensions can be laid alongside of the 24-inch pipe now proposed.

DODABETTA RESERVOIR.

The present catchment area of this reservoir is 172·72 acres, of which 80·72 acres are private property and 92 acres Government waste and forest reserve. This area is a great deal more than what is required, and it will be reduced to 74 acres by cutting off 79·72 acres of the private land and 20 acres of the Government reserve as follows :—

Owners of Land.	Area.	Area to be cut off.	Area to be retained.
	ACRES.		
Mr. Misquith	5·00	5·00	0·00
„ Cowdall	75·72	75·72	0·00
Government waste and reserve	92·00	20·00	72·00
Total ...	172·72	98·72	74·00

The 20 acres of Government land which is to be cut off lies beyond the private lands, and there is no necessity to incur the expense of leading its drainage to the reservoir; because the present capacity of the reservoir is 3,000,000 gallons, or 400,000 cubic feet. This capacity is to be increased to 6,000,000 gallons or to 800,000 cubic feet. The rainfall is 62 inches per annum, and, supposing half of it reaches the reservoir, the discharge from 74 acres would be 3,841,920 cubic feet, or sufficient to fill the reservoir seven times in the year.

The cost of cutting off the surplus area and of erecting the protective bank of 74 acres for the sole use of the reservoir will be compensation for 2 acres of private land (cultivated) 500
Catch drains to carry away the drainage of the lands cut off ... 1,000
A small viaduct to carry this drainage under the supply channel of the reservoir 500
Total ... 2,000

The position of the reservoirs of the lands and of the works referred to is shown on the accompanying map.

The position of the proposed distributing pipes is for convenience shown also, but this part of the project is explained in another paper.

OOTACAMUND.
12th October 1881.

(Signed) J. O'SHAUGHNESSY, C.E.,
Local Fund Engineer, Nilgiri District.

APPENDIX B.

IMPROVEMENT OF OOTACAMUND WATER-SUPPLY.

SKELETON ESTIMATE.

No. of Item.	Description of Work.	Reference.	Cost of each Item.	Total.
			Rs.	Rs.
	North side of Lake.			
1	Fencing round Marlimund reservoir, length 5,750 feet.	Explanatory memorandum.	4,500	
2	Widening bye-wash, by moving back road, by 15 feet.	Do. ...	2,400	
3	Catch channels to bring extra water to Marlimund reservoir (about 4 miles at Rs. 500).	Do. ...	2,000	
4	Masonry conduit from Marlimund reservoir to Snowdon tunnel (see Captain Morant's report No. 206, 1st June 1877, paragraph 11).	Explanatory memorandum and Captain Morant's report No. 206, 1st June 1877, paragraphs 11 and 12.	14,646	
5	Cement piping (12 diameter) from tunnel to proposed service reservoir near St. Stephens', 4,000 feet at Re. 1¾ per running foot (say).		7,000	
6	Service reservoir (to hold three days' supply)	Explanatory memorandum.	35,000	
7	Distribution piping as per detail list	Do. and map.	54,000	
8	Fountains (three) and stand-pipes (thirty), "fountains" Rs. 1,200 each = Rs. 3,600, and stand-pipes Rs. 200 each = 6,000.	Do. ...	9,600	1,29,146
	Total, north side of lake (say) ...	...	...	1,29,000
	South side of Lake.			
1	Raising by 6 feet the bund, &c., of Dodabetta reservoir.	Explanatory memorandum and plan.	1,700	
2	Fencing round reservoir (1,400 feet)	Explanatory memorandum.	1,050	
3	Iron piping (4 inch diameter) to service reservoir west of Elk-hill aqueduct and fencing along cascades.	Do. ...	16,070	
4	Service reservoir to hold three days' supply ...	Do. ...	8,500	
5	Piping (as per detail list) for distribution ...	Do. and list and map.	38,000	
6	Stand-pipes (five at Rs. 200)	Do. ...	1,000	66,320
	Total, south side of lake (say) ...	...	...	66,000
	Grand Total ...	...	...	1,95,000

DETAIL LIST OF PROPOSED MAIN DISTRIBUTION PIPING.

Distinguishing No.	Lines of Pipe.	Diameter of Pipes.	Length in	To supply.	
	North of Lake.	IN.	FT.		
1	From service reservoir to Club road and by Westbury road to Kandal (Pykara road).	4	1,980	Branch No. 2, population.	595
		3	4,290	Do. „ 3, „	1,249
				All between Westbury road and Kandal stallish, and whole of Kandal	1,551
	Total, Length No. 1 ...	...	6,270	Total ...	3,426
2	From No. 1 (at ⅛th of a mile) along present channel.	3	2,640	All between it and Westbury road, population.	595
3	From No. 1 (at ⅛th of a mile) at Hadfield's roads and along that road to Westlake.	3	1,980	Branch No. 4, population.	942
		1¼	3,960	Seventeen European houses	398
	Total, Length No. 3 ...	...	5,940	Total ...	1,340
4	From No. 3 (at ⅛th of a mile) at Sandrock along Wrightsford road with three minor branches (in all ⅞ths of a mile) to Mettrahatti.	6	1,650	Roman Catholic establishment	942
		1¼	990	European houses and whole of Mettrahatti.	
5	From service reservoir to Lake and thence to Lamas (Lake road).	5	1,650	Branches Nos. 6, 7, and 8, population ...	3,914
		4	3,630	Public offices, Jail, Police Lines, &c.	1,214
	Total, Length No. 5 ...	...	5,280	Total ...	5,128
6	From near end of No. 5 along middle Lamas road to market.	3	1,980	Part of bazaar (say) ...	2,000
7	From end of No. 5 along Lake road to Lady Hobart's school.	3	1,320	Do. do. do. ...	1,320
8	From No. 5 (at ⅞ths of a mile) near Hewett, along Telegraph line and along Commercial road both ways to market and Closing open.	3	3,960	Whole of Agraharam, Tonga Company's stables, Alexandra Hotel, &c. ...	785
9	From service reservoir along Snowden road to Mt. Carmel and thence to Allenby's stables.	3	3,300	Thirteen European houses, Allenby's stables, Engineer's office, &c. ...	996
10	From pipe between fourteen hundred and seven reservoir, starting near Shreve cottage and along St. Ann's Hill to near Ootty.	3	3,042	Eleven European houses and Family clubs ...	766
	Total, Running Feet ...	...	35,970		

ABSTRACT.

	Diameter of Pipe.	Lineal Feet.	Rate per Lineal Foot.	Total each size.	Grand Total
	IN.	FT.	RS. A. P.	RS. A. P.	RS.
Part of No. 5	5	1,650	2 10 0	4,331 4 0	
Part of No. 1 (1,980 feet), and part of No. 5 (3,630 feet)	4	5,610	2 0 0	11,220 0 0	
Part of No. 1 (4,290 feet), whole of No. 2, part of No. 3 (1,980)	3	23,760	1 6 0	32,670 0 0	
Part of No. 4 (1,650 feet), and whole of Nos. 6, 7, 8, 9, and 10					
Part of No. 3 (3,960 feet), and part of No. 4 (990 feet) (*straight iron*) ...	1¼	4,950	1 2 0	5,568 12 0	53,790
Total, Running Feet ...	...	35,970	...	...	
Total, north of lake (say) ...	...	...	...	...	54,000

DETAIL LIST OF PROPOSED MAIN DISTRIBUTION PIPING.

Distribution No.	Lines of Pipe.	Diameter of Pipes.	Length in	To supply
	South of Lake			
1	Main from service reservoir to Woodstock	in. 4 3 1¼	ft. 3,630 2,970 6,000	All branches.
	Total, Length No. 1	...	12,600	
2	From ¼ths of a mile, 11 main near Elk-hill house.	1¼	2,112	Elk-hill house, Little Shoreham and Shoreham.
3	From No. 2 to bank and houses near lake.	1¼	1,980	Bank, &c.
4	From No. 2 at same point as No. 3.	1¼	2,310	Abdul Khader's shop, &c.
5	From ¼ths of a mile of main to brewery, &c.	1¼	1,320	Brewery, Stollenberg, A.B.C. ground, &c.
6	From ⅛ths of a mile of main to Bakie house, &c.	1¼	1,320	Bakie house, &c.
7	From 1¼th of a mile of main to Theakes' church with branch to "Mobernane."	1¼	4,620	Oakfields, Birdwood, Cotton Wood, Theakes' church, Mobernane.
8	From ¼ths of a mile of main to Barton cottage, &c.	1¼	1,320	Burton cottage, &c.
9	From ⅜ths of a mile of main to Blackwood cottage.	1¼	1,650	Geranium cottage, West cottage, Blackwood cottage, &c.
	Total, Running Feet ...	...	30,030	

ABSTRACT.

	Diameter of Pipe.	Lineal Feet.	Rate per Lineal Foot.	Total each size.	Grand Total.
	in.	FEET.	RS. A. P.	RS. A. P.	RS. A. P.
Part of No. 1 (3,630 feet)	4	3,630	2 0 0	7,260 0 0	
Do. of " 1 (2,970)	3	2,970	1 6 0	4,083 12 0	
Do. of " 1 (6,000 feet) and whole of all other branches (except two) ...	1¼	23,430	1 2 0	26,308 12 0	37,792 8 0
Total, Running Feet ...		30,030			
Total, South of lake (say) ...					38,000 0 0

EXPLANATORY MEMORANDUM TO ACCOMPANY ESTIMATE FOR WATER-SUPPLY IMPROVEMENT.

North side of Lake.

Item 1.—*The fencing round the reservoir* is intended to be of four lines of galvanized iron wire 1 foot apart running through tarred teak uprights 9 feet apart, of a total height of 6 feet, of which 2 feet buried in the ground. This will prevent cattle from getting to the water and fouling it by droppings and wallowing. It will also keep out human trespassers who now frequently use the lake to wash themselves, and cattle in partly from ignorance and partly from the temptation afforded by unobstructed facility. Of course a watcher will be required, no matter what may be the character of the enclosing fence.

Item 2.—*Widening Bye-wash.*—On the sufficiency of the surplussing arrangements depends the safety of the reservoir; those in existence, though they have proved sufficient for the present catchment basin, are, according to theory, perilously small, and when the catchment basin is increased, as proposed, they must be widened by 15 feet.

Item 3.—*Catch Channels.*—Though the existing* reservoir when full holds enough† for a five months' supply, its present catchment basin does not suffice to frequently fill it, and it is therefore proposed that, if found necessary, water from other gathering grounds should be led to the reservoir. See Appendix A.

* Capacity 40,000,000 gallons.
† 30 Gallons per head per diem × 12,000 population × 153 days + 10,000,000 gallons evaporation = 45,450,000 gallons.

Item 4.—*Masonry Conduit from Reservoir to Snowdon Tunnel.*—It has been decided that, on the score of both cleanliness and economy of water, it is necessary to enclose the channel, and the fall available being small, a masonry conduit will be much cheaper than iron pipes; such a conduit has been already designed and estimated for by Captain Morant.—See paragraph 11 of his report No. 206, 1st June 1877, the cost being Rs. 14,646.

Item 5.—*Cement piping from Snowdon Tunnel to proposed "Service" Reservoir near St. Stephens' Church.*—For the same reasons as those given as regards Item 4, this portion of the channel should be enclosed, and, as the fall is considerable, a 12-inch pipe will be sufficient to discharge all that is required (240,000 gallons in twelve hours) running three-fourths full. An iron pipe of that diameter would cost about Rs. 6-4-0 a running foot, but as with proper surplussing arrangements at the service reservoir there need be no pressure on the pipe, a cement pipe, as proposed in paragraph 12 of Captain Morant's report, No. 206, dated 1st June 1877, will do, and this according to his estimate will cost only about Rs. 1-2-0 a running foot, or a total for the 6,000 feet of Rs. 6,750, (say) Rs. 7,000.

Item 6.—*Service Reservoir near St. Stephens' Church.*—From this it is proposed to lead off the distributing mains; it will serve as the pressure reservoir, and it is thought that to prevent inconvenience in the event of stoppage of supply from the Marlimund reservoir for a time to admit of repairs to that reservoir or to the channel from it, it would be advisable to make this service reservoir of a capacity to hold three days' supply, *i.e.*, 720,000 gallons. With a depth of water in it of 5 feet, which has been adopted, the area of the reservoir would have to be 14,400 square feet. It would have to be cut out of the side of the hill, and this would, if it were made square, necessitate such a great depth of cutting over part of the area that it is considered advisable that it should be 60 feet broad × 240 feet long, therefore the *walls* would have to be 9 feet high, and where not built into the sides of the excavation, of a mean thickness of about 4 feet, where merely face walls to the excavation they might be of a mean thickness of 2 feet; they should be of best brickwork in cement and coated on exposed faces with cement. The *floor* and foundation of walls, a 1 foot 6 inches thick platform of cement concrete. Surplus might be provided by a 9-inch iron pipe leading for about one-eighth mile to either of the natural streams east or west of Church Hill. From this reservoir would take off one 4 inch, one 5 inch, and one 3 inch main (Nos. 1, 5 and 9 in detail list of distribution piping) with the necessary controlling valves. The total cost at rates furnished by Mr. O'Shaughnessy would be approximately Rs. 35,000.

Item 7.—*Distribution Piping.*—The system of mains proposed is indicated in the "detail list" of distribution piping and on the plan herewith. The sizes of the pipes would probably require rearrangement (almost always in the direction of reduction) when detail levels are taken for working the system out with accuracy. It has been assumed that the pipes should be able to carry the full daily supply in *twelve* hours. The rates have been arrived at from those again in the attached letter from the Ashley Works, Coonoor.

Item 8.—It is considered that there should be provided three additional *street fountains* and thirty "*standpipes*" fitted with "self-closing lever valves" which will only allow a certain quantity of water to pass each time the knob or handle is lifted, and with caps from which a water-cart can be filled into which a hose may be attached. The former, will cost probably Rs. 1,200 each, and the latter Rs. 200 each.

SOUTH SIDE OF LAKE.

ITEM 1.—*Raising head, &c., of Dodabetta Reservoir.*—The population south of the lake is 1,869; taking it as 2,000, the total storage required is 2,000 × 90 gallons × 150 days = 6,000,000 gallons. The existing reservoir is said* to hold 3,000,000 gallons (this is probably under the mark), and I have ascertained from a survey (plan herewith) that by raising the full water-level by 6 feet, the contents would be increased by about 3,073,000 gallons, and the estimate provides for such raising of the bund, waste weir, bye-wash, &c. The catchment basin and rainfall are ample.

ITEM 2.—*Raising round Reservoir* to be of same character as described for *Item* 1, *north side*.

ITEM 3.—For the reasons given under *Item* 4, *north side*, it is proposed to *carry the whole channel from the reservoir* (with the small exception named below); the full available being great a stuff iron pipe (4-inch diameter) will suffice and be the cheapest arrangement. The estimate therefore provides for such a pipe to the "service" reservoir, excepting along two cascades (700 feet in length) which it is proposed only to *fleme*, leaving the water to be aerated and oxygenized by the exposure to the air and the tumbling down the cascades, a total height of about 200 feet.

ITEM 4.—*Service Reservoir* to hold three days' supply equal 120,000 gallons, 2,400 square feet required. There is a capital site between "Pythouse" and "Elk-hill Lodge" (or "Cottage") and on the general lines indicated under *Item* 6, *north side* (except that this *reservoir* might be square and the surplus pipe only a few feet long), the cost would probably not exceed Rs. 8,000.

ITEM 5.—*The remarks on Item* 7, *north side*, are applicable to this.

ITEM 6.—*It is considered that* "five standpipes" of the character and not mentioned under Item 8, *north side*, should be provided.

(Signed) G. T. WALCH,
Executive Engineer, P.W.D.

N.B.—It will be observed that all the arrangements and calculations in the above estimate have been made for a supply of 20 gallons per head *per diem*; but *first* as it reasonably dry years the quantity interrupted may be rather short of this; *second* as the population do not really require more than half this amount; and *third* as there are wells and springs to supplement the supply, the Committee in their report have adopted 10 gallons per diem as the standard. As, however, in all years of ordinary rainfall, 20 gallons may safely be distributed, they prefer not to alter the estimate framed by Mr. Walch.

* See paragraph 27 of Colonel Walhal' memorandum, No. 215 W., printed with Proceedings of Madras Government, No. 191 W., 8th January 1878.

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REPORT.

THE Committee appointed under G.O., 6th June 1881, No. 1408 W., to consider and report on the measures deemed to be urgently required for the improvement of the station of Ootacamund, and to give an approximate estimate of the cost of the needful works, have now the honor to submit their views for the favorable consideration and orders of Government.

2. Before doing so they beg to explain that the delay which has occurred in submitting their report, has chiefly been due to the necessity for personal examination of the various localities, and discussion of details of plans for water-supply and drainage, before a final decision could be arrived at.

3. It may also be mentioned that Colonel Hasted, Major Mead, and Mr. Walch, owing to the calls of their respective duties, have been obliged to absent themselves from the later meetings; they, however, afforded valuable assistance to the Committee in the early stages of the inquiries. Mr. Minchin also had to leave for England without taking part in the discussions.

4. The work of the Committee was confided to two Sub-Committees, who, in addition to minute personal inquiry, have thoroughly considered all the important reports bearing on the sanitation of Ootacamund which have previously been submitted to Government; and the following conclusions, in which the members are unanimously agreed, will, for the sake of convenience, follow much the same order in which the various subjects of inquiry have been taken up by the Sub-Committee alluded to:—

I.—SUITABILITY OF THE EXISTING SUPPLY OF WATER IN QUANTITY AND QUALITY.

5. Ootacamund is divided into two distinct areas, each of which has its storage reservoir, one the Marlimund tank, north, with a calculated capacity of 50,000,000 gallons; the other the Dodabetta tank, south, capable of containing 3,000,000 gallons.

6. Allowing 10 gallons per head per diem, and under the supposition that it is necessary to store a five months' supply to meet the requirements of exceptionally dry seasons, the Committee consider the storage capacity of the Marlimund reservoir ample for the present inhabitants, about* 11,000, and for reasonable future increase, as 16½ million gallons is all that would be consumed in that time.

* By the last census the total population *north* and *south* of Ootacamund has been shown to be 12,396.

7. Major Morant has, it is true, in his report, as per margin, calculated that the supply is inadequate, and with a view to counteract this suggested the construction of another reservoir below Snowdon House, but adds that at least nine-tenths of the volume is now wasted in distribution. If, as will presently be shown, the drainage of not less than 300 acres can be counted on for storage, 68 millions of gallons would be received each year by the reservoir, assuming that only 10 inches out of the average annual rainfall of 42 inches be intercepted, and the Committee therefore are satisfied that with due precautions the existing supply should prove ample.

See page viii and ix, Appendix XIX. Report prepared under G.O., No. 716, dated 23rd May 1877.

8. The quality of the water collected in the reservoir is not, however, satisfactory. A large proportion of the area of the catchment, even at the time of its construction, was under tea cultivation, which, as the plants need considerable manuring, renders this part of the supply unfit for drinking.

9. To buy out the owner of the Tudor Hall estate would prove too expensive, but the Committee have had under consideration an alternative plan which, though not worked out in all its details, affords *primâ facie* evidence of a less costly solution of the difficulty.

10. By excavating a catch-drain immediately below the Tudor Hall tea estate, it is hoped that all the impure supply from this source can be led off and delivered below the reservoir into the waste channel.

11. At the same time, in order to make good the area thus cut out (189·63 acres of the catchment, 266 acres in all) and if necessary add considerably to the supply, it is proposed to collect the drainage of not less than 200 acres of the upper part of Snowdon Hill (an area which is probably more free from all sources of contamination than any other) and lead it past Snowdon House in the manner indicated in the annexed survey and estimate, *Appendix A*.

12. To the Snowdon area will also be added the drainage from 35 acres immediately north, and 55·42 acres south, of the reservoir, to be led in by simple catch-drains.

13. The total catchment area thus secured will be as follows :—

		Acres.
From present catchment	...	79·35
From Snowdon (available)	...	120·00*
From the new area North	...	35
Do. do. South	...	55·42
		90·42
Total Acres (say)—		315·00

* One-fourth of the Snowdon area is thrown out to the N. to lock them, plus the whole drainage of the 90 acres on that side. All the waters from the supply sliding on to these pipes the drainage of at least 150 acres or as much more as may be needed to added to the catchment.

14. As regards the reservoir on the south side below Dodabetta, although the number of inhabitants which it will have to supply will probably not exceed in future 2,000, the present capacity, 3,000,000 gallons, is considered insufficient, and the Committee propose to increase it by 2,325,000 gallons, raising the bund 6 feet.

15. But here again much of the catchment area being under high cultivation, such portion as cannot be readily acquired, or effectively controlled must be cut off, and a fresh supply from a thoroughly reliable source brought in. Fortunately there will be neither difficulty nor any appreciable expense in effecting this. *See Appendix A.*

16. The Committee would here venture to express an opinion that the measures above recommended for insuring a perfectly pure source of water-supply for Ootacamund will have but little practical effect, unless the most stringent rules are not only laid down but enforced, for preventing in future all contamination of the catchments.

17. Already injunctions on this subject have been issued by Government; but it is found that owing to various causes, these have not been complied with as strictly as could be desired, and it would appear essential that in the yearly Administration Report of the Municipality, the manner in which the purity of these areas is maintained, should be invariably and specially dwelt on for the information of Government.

18. Not only should the catchment areas be properly fenced off, but even grazing of cattle should be prohibited.

19. In immediate connection with the supply of water for the station, and as a possible substitute for storage reservoirs, the Committee have had under consideration proposals for an extensive construction of wells, both public and private, and in reply to a circular addressed to house-holders with this object have elicited the fact that there exist already not less than 200 wells and 40 springs of water, many of the latter being perennial. Although this points to the existence of a large supply of drinking water in ordinary years, the Committee are inclined to think that neither on the score of purity nor of permanency in exceptionally dry seasons, can either or both of these sources be implicitly relied on.

* Well water in the latter is very impure.

These wells will have to be filled in or Committee consider that well water is permanently secured now.

20. From evidence before them the Committee consider that well water in Ootacamund is not always pure, and as regards quantity and permanency of supply, several wells, which on first construction gave good promise, are shown to have subsequently run dry.

21. Whether special encouragement should be held out to construct wells may be a matter for future consideration; but for the present the Committee think on the whole that the construction of wells may be left to private individuals.

II.—Best means for ensuring the Supply of Water.

22. There can be no doubt that, as at present distributed in open channels, an immense percentage of the water, estimated as shown by Major Morant at no less than nine-tenths of the total volume, is lost. The remedy for this is simple, and the Committee are of opinion that the only proper way to conserve the water, which in addition to loss in volume is subject to all kinds of contamination, is to conduct the supply to its destination in masonry conduits and pipes.

23. The general features and probable cost of the scheme are given in Appendix B, from which it will be observed that, as regards the northern area, the water is to be conveyed in a closed masonry channel from the Marlimund reservoir to a point immediately above St. Stephen's Church. Here there will be a pipe head reservoir, from which the distribution will be made in iron pipes of varying capacities, to all the most suitable points.

24. For the southern area the distribution would be wholly by iron pipes carried from the Dodabetta reservoir to the most distant points of supply.

III.—Drainage Works required.

25. Under this head the drainage of the bazaars claims first attention. In the opinion of the Committee the scheme framed by Mr. O'Shaughnessy for the drainage of the main Ootacamund bazaar, estimated to cost Rs. 88,400, if supplemented by gullies with gratings, and with short lengths of pipe, to drop the scourings of the houses and backyards into the street drains, will prove suitable, particularly if everywhere stone surfaces are provided as a protection against the rough usage to which all such drains are necessarily exposed in effecting the daily cleansing, &c.

26. There is every reason to hope that, after the proper levelling and sloping of all the backyards, as contemplated by Mr. O'Shaughnessy's scheme, the provision at intervals throughout the streets of receptacles for filth and rubbish, and the strict enforcement of all conservancy rules by the municipal servants under the lately appointed Health Officer, the formation of a rotten soil should be impossible in future.

27. In addition to the special drainage works above for the main bazaar, analogous but less costly measures must be carried out for Kandal Town, which is now in a very filthy state.

28. The drainage also of one or two small localities like Bandi Shola, which cannot conveniently be brought into any large system, should be dealt with by cesspits, which will have to be cleaned periodically.

29. Next in importance to the proper provision of surface drains for the several bazaars, &c., is the removal of the sewage, which is at present, with the exception of that from Kandal, discharged into the lake, the water of which thus becomes more foul year by year. The upper portion, east of the Willow Bund, is now in great measure a sedgy pond, covered with much floating weed, and with sewage accumulations at the extremity of all the bazaar drains. Instead of the beautiful feature which it might easily, with a little care and taste, be made, the lake is rapidly becoming a disgrace to Ootacamund.

30. Some slight modifications in the details of Captain Tulloch's project have been recommended by the professional officers on our Committee, and it is also thought that instead of commencing the sewer near the head of the lake, a sewage pipe of small capacity, (preferentially of iron,) should be carried up as far as the Madras Carrying Company's premises, as a good deal of foul matter is now discharged into the supply channel from that quarter, which it would otherwise be difficult to dispose of. These slight modifications would approximately raise the estimated cost from Rs. 74,000 to Rs. 90,000.

IV.—Objectionable Occupations.

31. At various places throughout Ootacamund objectionable occupations have been allowed to spring up. Though the removal of such is only matter for compensation, as the provisions of the Land Acquisition Act can be put in force, the cost will be heavy, and should be undertaken with discrimination, and be only resorted to in the most urgent cases.

32. Among the most needful measures in this respect will, the Committee consider, be the following :—

(1) The acquisition for public purposes of Toppa Moodelly's lines and bungalow (at foot of Bombay House hill) and the land attached thereto.
(2) Do. do. Tim's bungalow and site at foot of Shrubbery hill.
(3) The acquisition, drainage, and cleansing of—
(*a*) Joochim Potta, a collection of filthy houses.
(*b*) Charcoal village, do. do.
(*c*) The long unused Forest Department timber-yard, near Charing Cross, a great eye-sore in the heart of Ootacamund.
(*d*) Tirrovengadum Moodelly's land near Crewe Hall, most unsightly in its present condition.
(*e*) Other objectionable spots in scattered localities.

33. For the persons removed under (1), (2), and (3), fresh buildings sites, &c., should be found in Kandel and the necessary compensation paid. In most of these cases the amount of the latter has been sufficiently ascertained.

34. As a rule the future extension of native occupation should be allowed only in the last-named localities—Kandel now—where land may be acquired by the Government and laid out on a well-arranged plan.

34. In immediate connection with this subject, the Committee desire to bring to notice that the municipal authorities have apparently no sufficient powers, under the existing Act, to prevent the erection of unsightly tenements, and that if expenditure is now to be incurred as recommended for the removal of objectionable occupations, it would appear equally necessary to legislate with this object for the future.

V.—Objectionable Vegetation and neglected Lands.

36. The excessive growth of the Australian acacia ("*wattle*") has become a most serious evil in Ootacamund, and from the fact that in the form of a jungle or dense "bush", it has proved itself of value to householders as fire-wood, the nuisance threatens to be perpetuated indefinitely.

37. The Committee are satisfied that nothing short of complete extirpation of the "*wattle*" from the station will answer as should be used at, and they beg to press the necessity of this most earnestly on the consideration of Government. The medical officers are very pronounced in their condemnation of this overgrowth, which stops the free circulation of air, and affords shelter for nuisances of all description.

38. The Municipal Commissioners are understood to have under contemplation, the necessity of imposing such a rate on the cultivation of the *wattle*, as will prevent the areas so occupied being looked on as a valuable firewood preserve.

39. This measure may be deemed oppressive by house-holders, but the magnitude of the evil is such that, in the public interests, some sacrifice is called for. To minimise as much as possible the objections that may be entertained to the proposed action, the Committee would venture to recommend that Government meet the house-holders half way, by some such arrangement as the following :—

40. It is generally understood that to eradicate the *wattle* costs about Rs. 200 per acre, and that even with this outlay it is difficult for private individuals to ensure that the work is thoroughly done, or useless on daily hire, unless very closely watched. Fail to remove the roots which are the source of the evil.

41. The work can, in fact, be only done satisfactorily by prison labor, and the Committee would suggest that Government maintain an adequate body of convicts to meet the requirements of private individuals in this respect, and that the jail authorities be prepared to contract for the thorough eradication of the *wattle*, at the rate of Rs. 100 per acre.

42. By this means alone the Committee are convinced can this evil be met, and, should Government adopt the suggestion, they are of opinion that with due notice it would be perfectly equitable to enact that the retention of the obnoxious plant in any compound after a period of ten* years should be illegal, and subject house-owners to penalties, in addition to meeting the full cost of its eradication.

* Some members of our Committee consider that a grace of only *five* years should be granted.

43. In a minor degree other classes of vegetation, allowed to run into excess, are very objectionable, added to which heaps of paper, broken glass or china, with the thousand and one objects which, though not actually injurious to health, are in civilized countries prohibited as nuisances, meet the eye at every turn in parts of Ootacamund. For the removal of those and for securing proper attention to the tidy and neat appearance of the various private properties, the Committee consider the Act requires strengthening.

VI.—Slaughter Houses.

44. The mutton, beef, and pork slaughter houses should, in the opinion† of the Committee, as strongly urged by many medical authorities on previous occasions, be moved from their present site, closely adjoining the Main Bazaar, to a spot beyond Kandel on the Pykara road.

† Some members of the Committee would be satisfied with the less expensive proceeding of simply improving the present slaughter houses.

VII.—A good Daily Market.

45. Public opinion being unanimous as to the necessity for this, as lately evinced by the movement so heartily responded to, of associating the name of the late honored Governor with the work, that the Committee feel it would be superfluous to record their reasons for considering this to be perhaps one of the most urgent necessities of the station. They merely observe that the butchers' shops would all be transferred to this building, and that such removal would put an end to one of the most offensive sights in Ootacamund. Moreover, from information received, the work is certain to be remunerative.

46. Legislation will be necessary to compel butchers and persons of certain other callings to confine the sale of their wares exclusively to this new market.

VIII.—Miscellaneous Buildings, &c., required.

47. (*a*) A public cattle and handy-stand with proper shelter for the animals close to the market.
(*b*) Permanent lines for municipal coolies and bandy-men.
(*c*) More public latrines and urinals in various parts of the town.
Some of these works will be remunerative, (*a*) especially so.

IX.—Improvement and Planting of Public Grounds.

48. All the lower parts of Ootacamund suffer both in appearance and in salubrity, from the lodgment of water and imperfect drainage.

49. One of the worst localities in this respect is at present being dealt with in constructing a new road of approach to Government House and the Botanical Gardens, advantage being taken of the work to cut a deep drain which, with other arrangements, should in time have a marked beneficial effect.

50. But all the low ground extending down the valley to the head of the lake has water so near the surface that much of it is in a sedgy condition, overgrown with docks and other rank weeds, and is both offensive to the eye and unhealthy. The A B C ground is from this cause the most notedly catch-cold place in Ootacamund.

51. All the portion of the lake east of the Willow Bund is in the offensive condition previously described under head III above.

52. There are two ways of dealing with the matter, (1) by raising the level of all the affected grounds, or (2) by lowering the level of the water in the lake, which necessarily keeps up the spring level. The latter is obviously by far the cheapest plan, all that is needed being to cut down the level of the waste weir at the bund from 3 to 6 feet as may be desirable; in fact, by just so much as will lay dry the portion east of the Willow Bund. The ground so reclaimed may quickly and at small expense be turned into pleasure and recreation grounds.

53. The latter are much wanted for such purposes as Cricket, Polo, and Gymkana Sports, for which the present A B C grounds are much too restricted.

54. It must be borne in mind that the lake, as it stands, fulfils no useful functions for Ootacamund. It irrigates no ground below its bund, its water is unfit for drinking, unused for boating, and, if not ornamental, is valueless if not worse, as being little better in its present state than a receptacle for sewage.

55. The slope of the margins being very steep, the lowering of the present water-level by 6 feet would not narrow the present spread of the water in all by more than 30 or 35 feet at most; practically therefore this proposal, while pointing to an easy means for improving sensibly the sanitary condition of all east and north of the Willow Bund, and affording scope for improvements otherwise unattainable, would to no sensible degree interfere with the extent of the lake to the west of that point.

56. Instead moreover of leaving this latter portion in its present bald, ungarnished, and uncared-for condition, particularly along its northern margin, the Committee strongly advocate all the knolls down to the water's edge being planted with selected trees (conifers chiefly) thereby turning the lake into the most attractive feature in Ootacamund.

57. North and ... above the main bazaar it is very desirable that a ... should be cut out of the hill side leading towards the market place, and the excavated earth used for filling in the unsightly pits, and otherwise bringing into form this most unsightly and neglected portion of ground.

58. The Committee consider that in connection with these and other improvements, to be effected chiefly through the action of the Municipal Commission, it would be highly desirable to enlist the active aid of all house-owners, in effecting judicious clearances of over-planted land, and by planting ornamental trees in groups or singly where such would be most effective.

59. With this object they would strongly recommend that both the Superintendent of the Botanical Gardens, and the Gardens themselves, should be placed much more than has hitherto been the case, at the service of the public.

60. The duties of the former might, with great advantage, be strictly confined in future to the care of all public grounds in Ootacamund, and to affording advice and assistance gratis to all house-owners, who may be desirous of improving their compounds by planting or clearing.

61. He should maintain at the gardens a nursery of such young trees and shrubs as experience has proved to answer best, the plants to be sold to the public (of Ootacamund only) at strictly cost price, instead of as hitherto at practically prohibitory rates. It is not perhaps too much to say that, owing to the present high prices of the plants and to the location of the gardens, the latter have hitherto been of little or of no use to any one.

62. To these duties might with advantage be added the publication from time to time of price lists of all the saleable stock, including seeds procurable from the gardens, and a monthly Gardeners' Chronicle, giving hints regarding the flowers to be put in during the succeeding month, the cultivation of vegetables, fruit trees, &c.

63. As the Committee are given to understand that the present Superintendent has many miscellaneous demands on his time unconnected with Ootacamund, which are incompatible with those above alluded to, they trust the Government may find it feasible to relieve him of all extraneous duties.

64. X.—Cost of the several Proposals.

Water-supply, North side of Ootacamund.

		Rs.	Total Rs.
Additions to the catchment of the Marlimund reservoir with subsidiary works, &c., see Appendix A.		33,750	
Fencing and distribution generally, see Appendix B	...	1,29,146	
Extra establishment and contingencies at 10 per cent.	...	16,289	
Total, North side	...	1,79,185	

Water-supply, South side.

Alterations to catchment of Dodabetta reservoir, see Appendix A.		2,000	
Fencing and distribution generally, see Appendix B	...	66,320	
Extra establishment and contingencies at 10 per cent.	...	6,832	
Total, South side	...	75,152	
Grand Total for water-supply and distribution (in round numbers).	...		2,55,000

Drainage.

Surface drainage, main bazaar, with certain additions to Mr. O'Shaughnessy's estimate.		90,000	
Do. Kundal town	...	30,000	
Do. other localities	...	25,000	
Intercepting sewer as estimated by Captain Tulloch with certain additions to complete the scheme.	...	90,000	
Total, Drainage	...		2,35,000

Urgently required Improvements.

(*a*) *Unremunerative.*

Removal of objectionable occupation	...	50,000	
Improved lighting for the streets and roads	...	7,000	
Additional latrines and urinals	...	7,000	
Conservancy plant	...	7,000	
Office for Municipal Commission	...	10,000	
New road above the main bazaar, lowering the level of the lake, reclaiming same at upper end, &c.	...	40,000	
Planting public grounds, margin of lake, &c.	...	25,000	
Unforeseen contingencies	...	14,000	
Total, Unremunerative requirements	...	1,60,000	

(*b*) *Remunerative.*

New General Market	...	2,50,000	
Cattle and bandy stand	...	30,000	
Slaughter-houses	...	25,000	
Scavengers' and bandymen's lines	...	15,000	
Contingencies	...	10,000	
Total, Remunerative requirements	...	3,30,000	
Total for improvement	...		4,90,000
Grand Total under all heads	...		9,80,000

XI.—Ways and Means.

65. As comprehensive improvements on the scale above contemplated by the Committee would unquestionably insure a valuable enhancement to all property in Ootacamund, it is only reasonable that all house-holders should be prepared to undertake a fair share of the charge imposed by the provision of the means needed for their execution.

66. House-holders are now taxed for all municipal purposes to the extent of 7½ per cent. on the rental value of their properties.

67. This is sensibly lower than the incidence of taxation in Madras and other large towns, and the Committee see no reason why, in order to meet as far as possible the objects at present in view, a maximum *consolidated* rate of 12 per cent. on the high a consolidated tax as 12 per cent. and consider that 10 per cent. should be the maximum.

* Two members of the Committee deprecate so rental* should not be imposed, *i.e.*, under the proviso that the scheme in its entirety, as now recommended, commands the approval and sanction of Government. It is needless to say that legislation would be necessary for this.

68. While thus prepared to recommend an increase of taxation to this large amount in the conviction that the resulting benefits will in time well repay the same, the Committee would deprecate very earnestly any increase over and above the limit specified, as such would in all probability tend to discourage permanent residence on the part of those classes, whose presence it is on every account most desirable to encourage, viz., the retired servants of Government and others with limited means.

69. The Committee are given to understand that the Municipality have already addressed Government as to the propriety of raising a loan of four lakhs of rupees at 4 per cent., with a view to carrying into effect some of the most needful improvements specified in this report, and they are of opinion, from statements of the financial condition laid before them, that with a consolidated tax to the limit proposed, the Municipality could not only meet the demand for interest on the loan, but be enabled to create a sinking fund for the eventual extinction of the debt.

70. The total approximate outlay being close on ten lakhs, the Committee see no other means for meeting the difference, viz., six lakhs, than by a Government grant, and, however large the demand, they are encouraged to hope that, taking into consideration the peculiar position which this station occupies, and the functions it fulfils towards not only this Presidency, but it may fairly be said towards the rest of India, such may not be considered unreasonable.

71. They cannot do better than here quote the cogent arguments adduced by Lord Napier when, as Governor, he recorded the following observations in his minute, dated 13th September 1867. "The Government of Madras, acting with the sanction of the Government of India, has created Ootacamund, has beautified it, has rendered it accessible by expensive roads, has made it the seat of various public establishments, such as jails, dispensaries, orphanages, and plantations, has invited the sick and the suffering of all classes to repair hither from all parts of India for the restoration of their health and vigor. The Government has given an imperial character and significance to the place, but while doing so, has spread its benevolent intentions by leaving a source of mischief in the very centre of the cherished spot. I do not think it would be liberal or equitable, at this stage when the evil has just attained proportions which can no longer be concealed or denied, that the Government should create a Municipality and discharge upon it the burthen of remedying an abuse which the Government itself permitted to grow."

72. The time that has elapsed since these eloquent words were penned, and since the more prosaic, but not less accurate and forcible, reports previously alluded to were written by the professional officers of Government, has only served to confirm and intensify the truth of all that has been thus advanced.

73. The Municipality were created at a time, when few or none of the really essential sanitary requirements of this large and growing station, had even received an initiative.

74. With means which were, and still unfortunately are, barely sufficient to meet the most urgent daily demands, and with moreover an Act, the many imperfections of which are only too patent, they were apparently expected not only to initiate but carry out several large measures of reform and improvement most urgently demanded, and the Committee feel bound to submit that prompt measures are needed to rescue this deserving body from a most embarrassing position.

75. The appeal made by Lord Napier was promptly and liberally responded to by the Supreme Government, who in their Public Works Department letter No. 792 C, dated Simla, 2nd November 1867, conveyed sanction to Rs. 74,000 as an Imperial grant, on account of Captain Tulloch's estimate for the intercepting sewer. Most unfortunately this grant, owing it is believed to the exigencies of finance, was never availed of, and the work was consequently not carried out.

76. Looking to the foregoing considerations, and the fact that the Government of India has, it is understood, during late years given grants of not less than eight lakhs of rupees for general improvements, and lent seven lakhs more at 4 per cent. to the Simla Municipality for water-supply works, the Committee are sanguine that at least half of the 6 lakhs so urgently needed for Ootacamund may, under proper representation, be conceded as a grant-in-aid from *Imperial* Funds, with the object of carrying out the suggested improvements to this the Queen of hill stations and the finest sanitarium in India; also that the remaining three lakhs may be given from *Provincial*. These grants if conceded might if necessary be spread over the next three or four years.

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

(„) M. C. FURNELL, M D.,
Dy. Surgeon-General, Sanitary Commsr.

(„) N. ROUPELL,
Acting Commissioner, Nilgíris.

(„) R. J. BAKER, Major-General.

(„) H. R. MORGAN, Major-General.

(„) J. O. HASTED, Lieut.-Col., R.E.

(„) L. C. NANNEY, Surgeon-Major.

(„) J. SMITH, Surgeon-Major.

(„) H. R. MEAD, Major, R.E..

(„) G. T. WALCH, M. Inst. C.E..

(„) J. O'SHAUGHNESSY.

(„) W. E. SCHMIDT.

Extract from the note which ac-
- companied the Irrigation Budget
Estimates for 1883-84 — 105

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25. The Statement marked D, which
has been prepared with reference to
the Government of India letter No. 381
A.C, dated 30th November 1882,
communicated with G.O No. 3324
dated 15th December 1882, shows the
following rates % per centage which
the charges for establishment bear to
the expenditure on works and repairs.

	Actuals for 1881-82.	Regular Estimate for 1882-83	Budget Estimate for 1883-84
Imperial			
Productive Pub. Works	38.84	37.87	43.17
Irrigation & Navigation Canal Works	28.18	20.42	17.69
Provincial			
Irrigation & Navigation Works	27.49	27.02	26.99

The Establishment charges are not based on the cost of Establishment actually employed on the works, but on fixed rates of per centage calculated on outlay and revenue as in the case of P.W. D. and in the case of Productive Public Works, Imperial Account, the charge is calculated on the actual

From the 1st April last, the rates of per centage on outlay have been reduced from 25 to 23, and the following rates of per centages on Revenue have been fixed in lieu of the cost of the special Establishments.

10 per cent on Revenue collected in the P.W. department.

6 per cent on Revenue collected in the Revenue Dept. from the Productive Public Works.

The per centage charge is not calculated on outlay for repairs to Irrigation works under the charge of Collector, and therefore the average rate of Establishment charges for 1882-83 and 1883-84 for Irrigation and Navigation and Agricultural works is less than 23 per cent. The cost of Establishment actually employed

employed in the Project Drawing
for the investigation of projects is
charged to "Protective Public Works"
and the charge cannot be com-
pared with work outlay, as
the projects are still under in-
vestigation.

[illegible] 3/7/13 Harts
[illegible] Col. RE
Jany 3/13

Col: Engineer for
Supt

/ Jno. Eastwood /

Chief Clerk
Jany 3/13

Asst Engineer for
Supt

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Plan of Estate

Dale Lime Basalt Estate Operations by Dales
Dale

Plan of the Proposed Estimate for Estimated works Operations from the
Quarter ending Dec 1859

Scale	Description of Clamp	Clamp No	Estimate for 1859		Estimated Tons	Remarks
			Clamp Tons	Cubic Yards		
	Clamp Burning Kilns and Clamps					
	Clamp Burning Kilns and Clamps					
	Clamp Burning Kilns and Clamps		

Police Establishment

Store keepers

4	5	Store keepers	30	150	
7	8	Do	25	200	
8	6	Do	20	120	
7	7	Do	15	105	
26	26	Total Storekeepers		575	
		To Kurnool Canal Division vide Office Note from the Secretary to Government P.W. Dept. No 1482 dated 12 December 1882		199	
56				774	4218	5720

Medical Establishment

1		Assistant Apothecary			
4	6	Hospital assistants	25	65 to 60	275
		Jemadar allowance for one			25
		Bullock Bhut Do			12½
		Charge allowance for two @ 15 & the other @ 10.			25
9	3	Hospital servants & Lascars @ 7. 1 @ 6. 1 @ 4.			17
		Bullock Bhut allowance for one			3
14	9	Total Medical Establishment			357½
	4	Kurnool Canal Division vide Office Note from the Secretary to Government P.W. Deptt No 1482 dt 12 Decr 82.			110
12	13			467½	5610	3240
					1848	9960

| | | |

		Office Establishment (Cont)				
	1	Draftsman (200-250)	225	225		
	2	do 1 Class	60	120		
	11	do do	426	426		
	34			5976		
	3	3 Attendors	15.00	38		
	1	1 Guard	14	14		
	2	2 Farm Messengers	12.00	22		
	77	Messengers	4.00 3.00 3.77	53		
	93	93		137		
	36	38 Total Old Department Office Establishment.		30124	36 copies	30132
		2d Topographic Establishment				
	1	1 Superintendent	250	250		
	1	1 Head Draftsman	120	120		
	1	1 Fourth do	60	60		144
	1	1 Fifth do	40	40		
	1	1 Sixth do	30	30		
	1	1 Seventh do	25	25		
	1	1 Eighth do	20	20		
	1	1 Ninth do	15	15		
	1	1 Tenth do	10	10		
	1	1 Spare am Record keper	25	25		
	1	1 do do	16	16		
	1	1 Head Painter	20	20		
	1	1 Second "	12	12		
	1	1 Third "	12	12		
	2	2 Draftsmen	9	18		
	6	6 do	8	48		
	2	2 do	7	14		
	2	2 do	5	10		
	1	1 Clerk IV Class & Grade	35	35		
	96	Total Lithographic Establishment		960	11520 (b)	11100

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For Civil Secretariat Engineering Officers

	1	Clerk II Class 1 Grade		150	150
1	1	" II " 3 "		110	110
		" III " 2 "			
	1	" III " 3 "		55	55
1	1	" II " 1 "		45	45
1	1	" II " 2 "		35	35
2	2	" II " 3 "		25	50
	1	Draftsman 80-100		90	90
1	1	Do 1 Class		60	60
1	1	Do 2 "		42½	42½
1	1	Messenger		8	8
3	3	Do		6	18
12	12	Total for Each Officer		650	
12	12	Total for 12 Officers		7800	7800

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For Presidency Division

1	1	Clerk III Class 2 Grade		70	70
1	1	" IV " 1 "		45	45
2	2	" IV " 2 "		35	70
3	3	" IV " 3 "		25	75
2	2	" I " 1 "		17½	35
1	1	Cashier (Clerk III Class 2 Grade)		70	70
1	1	Draftsman 1 Class		60	60
1	1	Do 2 "		42½	42½
3	3	Do 3 "		25	75
1	1	Messenger		7	7
1	1	Do		6	6
17	17	Total Office Establishment Presidency Division		555½	6666

6666

31572

Chief Engineer's Office

		For Godavari Eastern Division.					
1		Clerk III Class 2 Grade	70	70			
2	1	" " " 1 "	45	90			
1	2	" " " 2 "	35	35			
1	1	" " " 3 "	35	75			
3	3	Draftsman 1 Class	60	60			
1	1	Do 3 "	25	25			
1	1	Messenger	7	7			
1	1	Do	6	6			
		Total Office Establishment					
11	11	Godavari Eastern Division		368	4416	4876	
		For Krishna Eastern Division					
1	1	Clerk III Class 2 Grade	70	70			
1	1	" " " 1 "	45	45			
1	1	" " " 2 "	35	35			
1	1	" " " 3 "	25	75			
3	3	Draftsman 1 Class	60	60			
1	1	Do 3 "	25	25			
1	1	Messenger	7	7			
1	1	Do	6	6			
		Total Office Establishment					
11	11	Krishna Eastern Division		348	4176	4176	
		For Eight Second Class Divisions					
1	1	Clerk III Class 3 Grade	70	70			
1	1	" " " 1 "	45	45			
1	1	" " " 2 "	35	35			
2	2	" " " 3 "	25	50			
1	1	Draftsman 1 Class	60	60			
1	1	Do 3 "	25	25			
1	1	Messenger	7	7			
1	1	Do	6	6			
9	9			298			
		Total for Eight Second Class Officer		298			
63	72			2887 2882	28608 32182	25032	

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Godavari Western
Krishna Western
Kurnool Canal
Cuddapah Canal
Buckingham Canal
Tanjore
Tinnevelly
Coimbatore
Cauvery

Office Establishment for Consulting Architect & Surveyor

1	1	Clerk of 1st Class 1st Grade	145	145		
1	1	Draftsman & Estimator	145	145		
1	1	Do 2nd Class	42½	42½		
1	1	Do 3rd "	25	25		
1	1	Messenger	7	7		
1	1	Do	6	6		
		Total Office Establishment				
6	6	Consulting Architect & Surveyor	370½	3246		3246

P.W.D. Office

1	1	Clerk of Class 1 Grade	140	140		
1	1	" III " 2 "	70	70		
1	1	" III " 2 "	35	35		
1	1	" III " 3 "	25	25		
1	1	Messenger	8	8		
2	2	Do	6½	13		
		Total Office Establishment				
9	9	P.W.D. Works	305	3660		3660

Office (Coll) Establishment Buckingham Canal

8	8	Clerk II Class 2 Grade	35	105		
7	7	" II " 3 "	25	175		
9	9	" I " 1 "	17½	157½		
8	8	" I " 2 "	12½	25		
1	1	Sircar	8	8		
22	22	Sircars	7	154		
25	25	Do	6	150		
		Total Office (Coll)				
69	69	Establishment Buckingham Canal		7745	9294	9294

For Three Project Divisions

2	2	Draftsman 1 Class	60	120	
2	2	Do 2 "	42½	85	
1	1	Clerk IV Class 3 Grade	35	35	
1	1	" I " 1 "	17½	17½	
1	1	Messenger	7	7	
1	1	Do	6	6	
		Total for each Project		270½	
8	8	Division Office		3	
24	24	Total for three offices		811½	

For Project Division

2	2	Draftsman 1 Class	60	120	
2	1	Do 2 "	42½	42½	
1	1	Do 3 "	25	25	
1	1	Clerk IV Class 3 Grade	35	35	
1	1	" I " 1 "	17½	17½	
1	1	Messenger	7	7	
1	1	Do	6	6	
		Total Office Establishment		255½	
8	7	Project Division			
		Total office Establishment			
32	31	Project Division Offices		1063	12,804

For Fifty five Sub Divisional Offices

1	1	Clerk IV Class 3 Grade	35	35	
1	1	Messenger	6	6	
		Total for each Sub		31	
2	2	Divisional Office		62	
110	110	Do for 55 Offices		4030	20160

	18600

		For Eighty two Detached Officers.				
1	1	Clerk D^c Class 3 Grade	25	25		
		Total for each Detached Officer		25		
1	1			82		
		Do for 82 officers.		2050	24600	26400
88	82					
		For Ninety one Overseers.				
1	1	Clerk E Class 1 Grade	17½	17½		
		Total for each Overseer		17½		
1	1			91		
		Do for 91 Overseers		1592½	19110	19320
91	91					
		Abstract of Office Establishment				
36	36	C. W. Depth Superintendent			36294	34232
28	29	Lithographic Establishment			11520	11100
28	29	Office of Chief Engineer			1020	1260
					49932	31572
72	72	Six Superintending Engineer Officers			6666	6666
17	17	Bundelcund Division Office			4416	3876
10	11	Godavari Eastern Division Office			4176	4176
11	11	Kistna Eastern Do			2568	25032 (a)
63	72	Eight 1st Class Division Officers			21792	27864 (b)
73	57	Seven 2d Do			3654	"
8	8	Nilgiri Division Office			1587½	15876
48	48	Six 3d Class Division Officers				
6	6	Officers of Consulting Architect & Government			3246	3246
9	9	Office Establishment C. W. Stores			3660	3660
69	69	Total Establishment Buckingham Canal			9294	9294
					12804	12984
32	31	4 Project Division Officers			2046	18600 (c)
100	110	55 Sub Divisional Officers.			24600	26400 (d)
88	82	82 Detached Officers.			19110	19320 (e)
92	91	91 Overseers.				
782	799	Total Office Establishment			292524	266148

(a) for 7 1st Class Divisions
(b) for 9 - 2d Class Divisions
(c) for 50 Sub Divisional officers
(d) for 88 Detached Officers
(e) for 92 Overseers.

Irrigation (Continuing) Establishment
including that for the Hurnoo Canal.

Godavari Delta System

Irrigation Establishment

1	1	Assistant Superintendent	120	120
1	1	Do Pumistry	18	18
1	1	Do Do	15	15
1	1	Do Do	12	12
3	3	Clerks	15	45
1	1	Sheriff	10	10
5	5	Delta Superintendents	70	350
10	10	Do	55	550
12	12	Do	40	480
5	5	Superintendent	8	40
1	1	Peons	6	6
3	3	Do	5	15
36	36	Havildars	6	216
75	75	Do	5	375
157	157	Total Irrigation Establishment Godavari Delta System		2352

Navigation Establishment

1	1	Boat Superintendent	116	116
2	2	Lock Superintendents	15	30
15	15	Do	12	180
19	19	Do	10	190
1	1	Do	9	9
12	12	Do	8	96
135	135	Lock Lascars	6	810
72	72	Do	5	360
		Superintendent (incumbent of pay to Ramdanmar Weir Superintendent)	4	4
357	357	Total Irrigation Establishment Godavari Delta System		1795

15	15	Carrots	8	12	0
17	17	Do	7	119	
21	21	Do	6	26	
17	17	Do	8	85	
1	1	Turnips Cash	12	12	
		Total Receipts Cash		£63	
29	29	Hire Sale Rye Grass			
		Carried forward Expenses			
		Total Receipts Cash Carried			
1	1	Carried Forward Contra	6	60	
11	1	Bullocks	20	20	
11	1	Calves	15	15	
11	1	Do	8	16	
11	1	Cows	7	7	
17	17	Do	6	102	
17	17	Do	8	20	
26	26	Horse Carried Forward		282	

15	15	Carrots	8	120	
17	17	Do	7	119	
21	21	Do	6	26	
17	17	Do	8	85	
1	1	Turnips Cash	12	12	
		Total Receipts Cash		£63	
29	29	Hire Sale Rye Grass			
		Carried forward Expenses			
		Total Receipts Cash Carried			
1	1	Carried Forward Contra	120	120	
1	1	Bullocks	70	210	
3	3	Do	55	275	
5	5	Do	40	240	
		Carried Forward	30	50	
1	1	Calves	15	15	
1	1	Cash	12	12	
17	17	Cows	8	136	
17	17	Do	7	119	
25	25	Do	6	150	
17	17	Do	8	136	
		Total Cash Receipts Expenses		1,628	
29	29	Hire Sale Rye Grass			
		Carried Forward Expenses			
		Total Receipts Cash Carried			
1	1	Carried Forward Contra	15	45	
3	3	Land Expenses Contra	12	96	

Cauvery Delta System

Water Regulation Establishment

1	1	Superintendent	17½	17½
3	3	Do	15	45
2	2	Do	12	24
4	4	Do	10	40
6	6	Do	8	48
1	1	Do	7	7
15	15	Lascars	6	90
26	26	Do	5	130
16	16	Do	4	64
		Total Water Regulation Establishment		
100	100	Cauvery Delta System		745½

Irrigation Establishment

1	1	Superintendent	8	8
1	1	Lascar	5	5
2	2	Total Irrigation Establishment		13
		Cauvery Delta System		

Sriranikantham Ancient System

Water Regulation Establishment

2	2	Mestries	30	60
1	1	Superintendent	12	12
21	21	Lascars	5	105
		Total Water Regulation Establishment		
24	24	Sriranikantham Ancient System		177

Chembrambakkam Tank

Water Regulation Establishment

1	1	Superintendent	12	12
1	1	Do	10½	10½
2	2	Lascars	6	12
5	5	Do	5	25
		Total Water Regulation Establishment		
9	9	Chembrambakkam Tank		59½

120

		Madras Water Supply & Irrigation Project		
1	1	Superintendent	25	25
1	1	Do	15	15
1	1			
4	4	Lascars	7	28
2	2	Do	6	12
4	4	Do	5	20
12	12	Total Madras Water Supply & Irrigation Project		100
		Palar Ancient System		
		Water Regulation Establishment		
		Chingleput District		
1	1	Overseer	20	20
2	2	Lascars	6	12
12	12	Do	4	48
		Salem District		
1	1	Superintendent	25	25
1	1	Do	15	15
3	3	Do	12	36
15	15	Lascars	4½	67½
		Total Water Regulation Establishment		223½
35	35	Palar Ancient System		
		Pennaur Ancient System		
		Water Regulation Establishment		
1	1	Superintendent	30	30
1	1	Overseer	8	8
2	2	Do	6	12
7	7	Do	5	35
		Total Water Regulation Establishment		85
11	11	Pennaur Ancient System		
		Irrigation & Navigation Works for which		
		Water Capital and Revenue Accounts are kept		
		Water Regulation Establishment		
		Salem District		
		Conservancy	1	21
			4	56
8	8	Lascars	3½	3½
10	10	Do		
17		Do		80½
		Total Water Regulation Establishment for Salem District		
11	11	Conservancy		

		Vizagapatam District			
1					
3	3	Superintendents	12	36	
1	13	13 Lascars	5	65	
4					
		Total Water Regulation Establishment			
3	16	16 Vizagapatam District		101	
4					
		Godavari District			
1	1	Lascar	9	9	
1	1	Do	7	7	
		Total Water Regulation Establishment			
2	2	Godavari District		16	
		Chingleput District			
1	1	Superintendent	10½	10½	
1	1	Lascar	6	6	
1	1	Do	5	5	
		Total Water Regulation Establishment			
3	3	Chingleput District		21½	
		South Arcot District			
1	1	Superintendent	40	40	
1	1	Do	35	35	
2	2	Do	25	50	
2	2	Do	20	40	
10	10	Lascars	8	80	
9	9	Do	6	54	
28	28	Do	5	140	
		Total Water Regulation Establishment			
53	53	South Arcot District		439	
		North Arcot District			
1	1	Superintendent	27	27	
2	2	Do	20	40	
1	1	Do	12	12	
1	1	Do	10	10	
5	5	Lascars	6	30	
15	15	Do	5	75	
		Total Water Regulation Establishment			
25	25	North Arcot District		194	

1	1	do	12	12		
2		do	10	20		
1	1	Common	6	6		
5		do	5	25		
8		do	4	32		
4		do	3	12		
		2nd Class Plain Plank		162		
32		Transporting Assist				
		Common Assist				
8		Carpenter	4	16		
		Joiner Plain Plank				
4		Common Assist		16		
		Joiner Plain Plank				
1	1	Engineer			15/-	15/-
2	2	do			35/-	70
4	4	do			30	120
7	7	Common			8	56
23	23	do			6	138
23	23	do			5	115
		Joiner Plain Plank				534
do	6	Transporting Assist				

		Carpenter Assist				
1	1	Engineer			15/-	15/-
1	1	Common			15	15
6	6	do			6	6
1	1	do			5	5
6	6	do			4	24
		Joiner Plain Plank				
9	9	Joiner Assist			5	45
		Labourer Assist				
1	1	Engineer			15	15
		Joiner Assist				
1	1	Engineer			15/-	15/-
1	1	Common			6	6
1	1	do			5	5
7	1	do			4	28
		Labourer Assist				
4	4	Carpenter			4	16
		Carpenter Assist				
2	2	Mason			3	6
		Labourer Assist				
12	2	Mason			3	36
		Joiner Plain Plank				185
		Joiner Assist				
1	1	Engineer			15/-	15/-
1	1	Common			6	6
1	1	do			5	5
6	6	do			4	24
		Labourer Assist				
9	9	Joiner Assist				50
		Labourer Assist				
1	1	Engineer			15	15
		Joiner Assist				

Navigation Establishment

South Arcot District

1	1	Superintendent	15	15
1	1	Do	10	10
1	1	Lascar	8	8
7	7	Do	5	35
		Total Navigation Establishment		
10	10	South Arcot District		68

X

Agricultural Works

River Conservancy Establishment

Godavery District

2	2	Superintendents	15	30
4	4	Lascars	6	24
		Total River Conservancy Establishment		
6	6	Godavery District		54

South Arcot District

3	3	Lascars	8	24
6	6	Do	5	30
		Total River Conservancy Establishment		
9	9	South Arcot District		54

Tanjore District

2	2	Lascars	7	14
20	20	Do	4	80
4	4	Do	3	12
10	10	Do	2½	25
		Total River Conservancy Establishment		
36	36	Tanjore District		131
1161	1161	Total Conservancy Establishment		9834 118008 122947

	Conservancy Establishment		
	Kurnool Canal Division		
	Sprigation		
3	Sprigation Superintendent	19 55 70	165
4	Amin't Do	15 30 225	75
10	Head Lascars	8	80
15	Lascars	7	105
17	Do	6	102
13	Do	5	65
3	Lascars for 3 Sprigation Superintendents	6	18
	Total Sprigation.		
65	Kurnool Canal Division		610
	Conservancy & Sprigation		
	Kurnool Canal Division		
1	Lock Superintendents	12	80
15	Do	10	150
20	Do	8	160
	Total Conservancy Establishment		
82	Kurnool Canal Division		394
	Total Conservancy Establishment.		
147	Kurnool Canal Division	1004	12028

† Includes 91 Lascars for 8 months at 6 and 7.
45 at 7 = 315
46 at 6 = 376
91 5918 = 4739
to be provided for from Temporary Establishment

	Special Revenue Investigation by Mr Wilson.		
	Office Establishment required for the preparation of Sprigation Accounts.	† 13000	13000
	Total Sprigation Establishment	143056	135947

Office Note from the Secretary to Govt P.W. Deptt No 300 of 13 Decr/82
Sprigation Branch

Temporary Establishment			1,00,000		25,000
Local Allowance					
Upper Godavari Allowance	5 D	15	180		
Wynad Allowance			1200		
Policing Steel Allowance			7000		
Presidency House Rent		800	9600		
Do Allowance		800	9600		
Total Local Allowances			27,580		24,800
Travelling allowances				2,00,00	2,00,000
Contingencies on Charges of Establishment					
P.W. Secretariat	500				
Office of Chief Engineer for Irrigation	150				
& Superintending Engineers Offices					
Subordinate Officers		4050	68,600	68,600	48,600
33 Officers at Rs 10/- per mensem	3300				
Four Pagoda Peons at Rs 5/- per mensem	200				

Abstract of the foregoing			
Engineer Establishment	8,8190		7,49,178
Upper Subordinate Do	3,77,490		3,65,256
Lower Subordinate Do	3,85,880		2,880
Police Establishment	5240		4668
Office Do	12,000		2,66,148
Irrigation Do	5200		1,35,947
Temporary Do	70186		25,000
Local Allowances	2,92,526		24,800
	1,43,056		
	1,00,000		
	27,580		
Total Salaries	18,12,696	18,12,696	16,15,577
Travelling allowances		2,00,000	2,00,000
Contingencies		40,000	40,000
Grand Total Executive Branch		20,52,696	18,64,477

Account Branch

Examiner Establishment

1	1	Examiner 3 Class	1100	1100		
2	2	Deputy Examiner	450 550	1000		
1	1	Assistant Examiner 2 Grade	250	250		
4	4	Total Examiner Establishment		2350	18200	29400

Accountant.

2	2	Accountant 1 Grade	400	800		
3	3	Do 2	295	885		* Including one Accountant 2d Grade attached to the C. & Audit Secretariat
6	6	Do 3	200	1200		
11	11	Do 4	115	1265		
35	35	Do 5	57½	1725		
57	57	Total Accountant		6665	78780	75780

Office Establishment

Including that sanctioned for Capital & Revenue Account and Code Work

Clerks

1	1	Clerk 2d Class 2d Grade	120	120		
1	1	Do III 1	90	90		
3	4	Do III 2	70	280		
5	7	Do II 3	55	385		
5	6	Do II 1	45	270		
10	10	Do II 2	35	350		
16	16	Do II 3	25	400		
9	9	Do I 1	17½	157½		
50	52	Total Clerks		2072½		

Menial Servants

1	1	Messenger	10	10		
1	1	Do	8	8		
1	1	attender	5	5		
1	1	Office Messenger	10	10		
1	1	Do	8	8		
4	4	Messengers	7	28		
6	6	Do	6	36		
2	2	Rollers	15	10		
17	17	Total Menial Servants		115		
271		Total Office Establishment		2187½	(4) 26250	19590
		Carried over a			134240	127770

(4) Due to the permanent Establishment sanctioned for Capital & Revenue Accounts having been sanctioned also to the appointment of a Clerk on 1st Class for Code work

Brought forward		133230		147770
Temporary Establishment				9600
Local and Charge Allowances				
1 Guardeny House Rent	500			
2 " Allowance	1200			
1 Charge allowance for 20 I.C. Sale Accountants	400			
4				
Total Local & Charge Allowances	2100	25200		25200
Total Salaries		108430	158430	162570
Travelling allowance	300	3600	3600	3600
Contingencies	400	4800	4800	4800
Grand Total			166830	170970

Deduct Contributions for two Accountants as follows:-

Income Tax	1			
Dastcharam				
Workcharge	1			
Total	2		4044	5160
Net Total Amount Branch			162786	165810

Abstract.

Quantum Branch	206296	186477
Amount	162786	165810
Total P.W. Department Establishment	2224052	2030987

D.C. Canavoy

Examiner P.W. Accounts.
Madras.
20/12

Ex. 21/12/82

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN M

R THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7		Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total	
Rs.	Rs.	Rs.	Rs.	Rs.	

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.
7				Brought forward ...
Provincial Services— Imperial— 12 Admin- istration Establishments				Civil Buildings—(Continued).
				Taking Cutcherry—
				Cutcherry for Collector & Establishment
				Quarters attached to the Civil Cutcherries
Chingleput Trichinopoly Nilgiri Peramb				Government House Furniture Charges
Salem Kurnool Canara Eastern Canara				Conducting Office and Quarters for Special Assistant Engineer
				Taking Cutcherry Furniture

Carried over ...

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187-7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187-7.		It N	Remarks and References.
	Actual to end of 187-7.	Probable during 187-7.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
37000	-	4000	3000			For 3000 Rs. of 22 Estimates No. 7, Class A Works of 1882/83 Budget.
2000	-	-	1000			For No. 3 Class A Works of 1882/83 Budget.
6000	-	-	6000			For Accompanying Abstract 220 of 22 August 1882 and No. 2158 of 17 August 1882. Class A Works of 1882/83 Budget.
5000	-	-	1000			
			2000			
			2000			
4800	-	1000	3800			For 3800 Rs. of 11 Estimates No. 1 Class A Works of 1882/83 Budget.
11000	-	10000	11000			

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7.	Outlay. Probable during 187 -7.	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
			Civil Buildings—(Continued).							
Provincial			Third class Taluq Cutcherry	3240	-	3040	3200			G.O. No. 241 of 8th May 1875—
Service—	Western	Cuttapah	Taluq Cutcherry							Sanctioning Estimate for repairs
Imperial—	Division		Improvements & Additions	7600	312	4588	3200			1882/83 Budget
P. Works		Nellore	Collectorate Cutcherry							G.O. No. 89 of 20th Jan 1882
Irrigation	Eastern	Masulipatam								Sanctioning Estimate for repairs
		Godavari		3450	-	3300	1950			to Taluq Cutcherry Buildings
										G.O. No. 2480 of 11th July 1878
										Sanctioning Estimate for repairs
										to Main Collectorate Buildings
										Budget
										G.O. No. 1238 of 10th Feb
										1875, Class A. No. 6, Class A. No.
										of 1882/83 Budget
										G.O. No. 1238 of 10th Feb
										1875, Class A. No. 6, Class C
										Work of 1882/83 Budget
										G.O. No. 2489 dt. 9th July 1875
										Class A. No. 15, Class C Work
										of 1882/83 Budget
										G.O. No. 92 dt. 16th Jany
										1882, Class A. No. 15 of
										1882/83 Budget. Revised
										Estimate sanctioned—
			Carried over ...	4900	-	4900	2350			

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(Continued).
			Court House & Police Building
			Building & Collector Quarters
			Court House, Treasury and Record Office
			Improvements to the Fort House
			Additions and Improvements to the Town Library

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADR

Amount of Estimate.	Outlay.		Grant, 187 -7 .		P
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.	
Rs.	Rs.	Rs.	Rs.	Rs.	

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

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GOVERNMENT OF MADRAS.

I.

DETAIL OF TH[E] UDGET-ESTIMATE FOR ORD[I]NARY WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

PAR[T].

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay.		Grant, 187 -7.		Item No.	Remarks and References.
					Actual to end of 187 -7.	Probable during 187 -7.	Amount.	Total.		
				Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Judicial Selection	Judicial Selection	Provincial Judicial Selection	Brought forward ...							
			Civil Buildings—(Ordinary).							
			Erection of Revenue Buildings Ordinary							
			Erection of Educational Buildings Ordinary							
			Erection of Medical Buildings Ordinary							
			Additions to Educational Buildings Ordinary							
			Additions to Medical Buildings Ordinary							
			Additions to Revenue Buildings Ordinary							
			Third class Jails Ordinary							
			Jails Ordinary							
			Repairs Ordinary							
			Repairs Special							
			Minor Works							
			Total ...							
Medical Establishment	Medical Establishment	Medical Establishment	Repairs Thousandam Ordinary							
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

MADRAS.

DETAIL OF TH... PART I.

...GET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MA... FOR THE YEAR 187..7 —(Continued).

Head of Classification.	Executive Division.	Locality.	I...	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187..7..	Outlay. Probable during 187..7..	Grant, 187..7.. Amount.	Grant, 187..7.. Total	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.	
				Brought forward ...						
				Civil Buildings—(Cont...d						
				do						
				do						
				do						
				Carried over ...						

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187-7—(Continued).

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187-7.	Outlay. Probable during 187-7.	Grant, 187-7. Amount.	Grant, 187-7. Total.	Item No.	Remarks and References.
				Brought forward...	Rs.	Rs.	Rs.	Rs.	Rs.		
				Civil Buildings—(Continued)							
Provincial Service— Imperial— Upkeep— Ordinary Buildings— Public Offices— Madras Collectorate— Buildings—											
Carried over...											

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE GET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.
				Brought forward ...
				Civil Buildings—(Continued).
Provincial Services Imperial Natural Public Works				Establishments to the Dt. Magistrate Cuttack
Civil Buildings				Retiring Quarters
do Lithology				Do
Do Forest				Range Forest Officer

Carried over

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7	Probable during 187 -7	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
800	-	-	600			G.O. No 229 of 20th August 1879. Item No 40 Class A Works of 1882/83 Budget
1200	-	-	1200			G.O. No 1570 M. of 23rd June 1882. Item No 43 Class A Works of 1882/83 Budget - Estimate revised - Item No 27, Class A Works of 1882/83 Budget

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMEN

PA

DETAIL OF T... DGET-ESTIMATE FOR ORIGINAL WOR...

Head of Classification.	Executive Division.	Locality.	Project and Works.
Provincial Services— Imperial— Inland Communication			Brought forward Civil Buildings—(Continued).
do Public Works Funds			Medical Storeyard Court
Local Funds— Municipal Funds			Ditto
Public Buildings			Purchase of House at Mannargudi for a Residence for the District Judge.

MADRAS.

OF MADRAS.

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UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 -		Item No.	Remarks and References.
	Actual to end of 187 -7	Probable during 187 -7	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
						Repairs to Storeyard Court
						Repairs to Medical Store
						Repairs to Court
						Repairs to Court
						Repairs to Court

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNME

FA

DETAIL OF TH GET-ESTIMATE FOR ORIGINAL WOR

Head of Classification.	Executive Division.	Locality.	I P	Project and Works.
				Brought forward
				Civil Buildings—(Continued).

MADRAS.

OF MADRAS.

L.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNME

PA

DETAIL OF THE DGET-ESTIMATE FOR ORIGINAL WO

Head of Classification.	Executive Division.	Locality.	It N	Project and Works.
				Brought forward
				Civil Buildings—(Continued).

MADRAS.

OF MADRAS.

L

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7.		Ite No.	Remarks and References.
	Actual to end of 187 -7.	Probable during 187 -7.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNM

PA

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WO

Head of Classification.	Executive Division.	Locality.	Item No.	Object and Works.
Provincial Services				Brought forward.
				Civil Buildings—(Continued).
Police	Ellore	Ellore		Construction of Police Lines
	Rajahmundry	Rajahmundry		Construction of Police Lines

Grand for Police works costing above Rs 1000, and Police Rs 1500 each

Carried

MADRAS.

OF MADRAS.

115 143

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7.		Item No.	Remarks and References.
	Actual to end of 187 -7.	Probable during 187 -7.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
						G.O. No 2490 dt. 29th Aug 1887
3590	-	-	3590			G.O. No 1200 dt. 19th May 1887
10000	-	-	4,500	8000		
						† Out of amounts on which the amount in the Grant will be included by the Superintending Engr of Police
			10,000			

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

MADRAS.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7.	Outlay. Probable during 187 -7.	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...							
				Civil Buildings—(Continued).							
Provincial				Central Medical at	27,742	10,258	5,792	1,869			G.O. No. 1869 dt. 17th Oct. 1857. Item No. 37 Class I. Block of 1857/58 Budget.
Provincial Services	Executive Engineer	Cuddalore		Drainage of the Cuddalore Chunam	17,500	-	-	17,500			G.O. No. 2291 dt. 5th Sept. 1882
Provincial	do	Chittoor		Compound wall to Caravan and Chittoor Hospital	600	-	-	600			Estimate awaited
do	do	Salem		Dudpatient Hospital Verandah and alterations to the Civil Hospital							
				Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMEN

PAR

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORK

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.
				Brought forward ...
				Civil Buildings—(Continued).
Provincial				
Services				
Provincial				
to Mis-				
-cellan-				
-eous	Madras	Madras		Construction of Criminal Lunatic Asylum

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 Amount.	Grant, 187 -7 Total.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.		
						G.O. No 2386 of 23rd Dec 1874
						G.O. No 1547 of 5th June 1875
						G.O. No 3200 of 9th Nov 1875
						G.O. No 3313 of 17th Nov 1875
						G.O. No 1218 K. of 23rd April
						G.O. No 991 K. of 21st April
						G.O. No 2636 K. of 19 Nov 18
						G.O. No 946 K. of 8th April
						G.O. No 2002 K. of 14th Aug
						Also No 643 Class No
						Estimate of 1874-75 Rs
						other

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount by Estimate.	Outlay. Actual to end of 187 -7 .	Outlay. Probable during 187 -7	Grant, 187 -7 . Amount.	Grant, 187 -7 . Total.	Item No	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Services	Civil Engineering	Provincial	Civil Buildings—(Continued).							
Ditto	Ditto	Ditto	Ditto							
Ditto	Ditto	Coimbatore	Ditto	1200	-	-	1200			G.O. No 1117 dt. 7th July 1882
Ditto	Ditto	Ditto	Ditto	4285	-	-	4285			G.O. No 2292 dt. 7th October 1882
Ditto	Ditto	Ditto	Ditto	2970	-	-	2970			Ditto
Ditto	Ditto	Ditto	Ditto	2520	-	-	2520			G.O. No 1990 dt. 7th July 1882
Ditto	Ditto	Ditto	Ditto	2650	-	-	2650			G.O. No 2252 dt. 7th Sept 1882
Ditto	Ditto	Ditto	Ditto	2600	-	-	2600			G.O. No 2652 dt. 12th October 1882
Ditto	Ditto	Ditto	Ditto	2530	-	-	2530			
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.
				Brought forward ...
				Civil Buildings—(Continued).
Provincial				
Services				
Provincial				
Medical				
Lunatic Asylum				Establishment of Superintendent
Contingencies				Bills
Furniture				Bills
Repairs				
Public				
Works				Bills
				Establishment of Executive Engineer's Office
				Carried over

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7.		Item No.	Remarks and References.
	Actual to end of 187 -7.	Probable during 187 -7.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
						Brought forward ...
1000	-	-	1000			Establishment of Superintendent
1000	-	-	1000			G.O. No. 2557 dt. 27-6-82
1533	-	-	1533			Bills
2500	-	-	2500			G.O. No. 2466 dt. 22-6-82
2650	-	-	2650			Bills
			14949			Establishment of Executive Engineer's Office
						Carried over

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

MADRAS.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
				Brought forward	Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Services Provincial Civil Works	Presidency Division	Kanjeevaram Kanjeevaram		Civil Buildings—(Continued). Alterations and Improvements to the Public Works Office	1770	—	—	1770			Estimate unrevised
				Revenue Offices	4,835	—	500	535			G.O. No. 2822 dated 7-10-1881. Item 4000 Class II Works 7-1881/83 Budget.

Carried over

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF TH… GET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	I…	Project and Works.
				Brought forward …
				Civil Buildings—(Continued).

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.

PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE B -ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.
				Brought forward ...
				Civil Buildings—(*Continued*).
				Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7.	Outlay. Probable during 187 -7	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.			Rs.	Rs.		
			[illegible] (Continued)							
Established and Rent-yielding Works			Communications							
	Salem		Completion of the road from Cumbum to the foot of the Sundakka Ghaut				50000			P.O. No 1053 W. of 18th January 1882 - Item No 4. Class A Works for 1882-83 Budget Estimate awaited - Estimate No 68 of 1881 for 1882
	Vizagapatam Ghauts		Ghaut Roads	1,25,000	15,000	75,000	90,000			P.O. No 1805 of 18th July 1876 - Item No 58, Class A Works, of 1882-83 Budget Revised Estimate awaited -
	Bellary	Madras	Turbine and Improvement to Bridges				10000			Estimate awaited - Item No 49 Class A Works 1882-83 Budget
			[illegible] Roads				10000			
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

MADRAS.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7.	Outlay. Probable during 187 -7.	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET ESTIMATE.

GOVERNMENT

PART

DETAIL OF THE ESTIMATE FOR ORIGINAL WORKS

Head of Classification	Executive Division.	Locality.	Item No.	Project and Works.
				Brought forward ...
				Civil Buildings—(*Continued*).

Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 188 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 . Amount.	Grant, 187 -7 . Total.	Item No.	Remarks and References.
				Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Services Imperial Buildings	Collector's Office	Guntur		Civil Buildings—(Continued) Improvements to the Collector's Cutcherry	3950	"	"	"			R.O. No. 1300 of 20th Feby 1883 Item No. 17 Class Allots 3950 for 1882/83 Budget
do	Kurnool			Treasury Cutcherry	4500	450	"	1500			R.O. No. 3529 of 15th Nov 1882 Item No. 1 Class Allots 4500 for 1882/83 Budget
do	Salem			Police Barracks	3460	"	"	1500			R.O. No. 1297 of 5th July 1883 Item No. 2 Class Allots 3460 for 1882/83 Budget
do	Collector's Office	Chingleput		Record Room Cutcherry	9500	"	"	4000			R.O. No. 1297 of 5th July 1883 Item No. 4 of 1882/83 Budget
do	Magistracy	Chingleput		Treasury & Cutcherry	3490	"	"	2490			R.O. No. 1297 of 5th July 1883 Item No. 3 of 1882/83 Budget
				Carried over ...							

Madras.

PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF T... GET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(Continued).
Provincial Services Imperial Revenue Collection Collectorate Cuddapah			Residence for the Head Assistant Collector
Cuddapah Collectorate			Cuddapah Collectorate
Salem Collectorate			Salem Collectorate
Salem Assistant Collectorate Cutcherry			Salem Assistant Collectorate
Salem Taluk Cutcherry			Third class Taluk Cutcherry

Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.		
1550	-	-	1550			P.D. Sanction No. of 18th June 1878. Item 1096 Class Works of 1882/83 Budget.
4575	-	-	2000			P.D. Sanction No. 7 of 4th November 1881. Item 67 Class Works of 1882/83 Budget.
22,150	-	-	12,000			P.D. Sanction No. 7 of 8th Oct. 1879. Item No 8 Class Works of 1882/83 Budget.
5340	-	-	5340			P.D. Sanction No. 8 of 8th May 1875 Item No. 9 Class Works of 1882/83 Budget.
7200	-	-	1000	5200		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF T... DGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 -- (Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -)	Outlay. Probable during 187 -7	Grant, 187 -7 - Amount.	Grant, 187 -7 - Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
			Civil Buildings—(Continued).							
Provincial										
Revenue										
Special										
Northern										
Circle										
Jail										
Cuddapah			Jail Cuttacherry	1800	212	1588	240			G.O. No 184 of 20 March 92 Class Abstr of 1887/83 Budget
Collectorate			Collectorate Cuttacherry	3870	2365	-	1000			G.O. No 1884 of 20 March 92 Class Abstr of 1887/83 Budget
Judicial										
Establishment			Jail Cuttacherry	2240	-	-	1400			G.O. No 3583 of 20 March 92 Class Abstr of 1887/83 Budget
Do Charges			Do Kitchen	1620	-	-	1000			G.O. No 3565 of 20 March 92 Class Abstr of 1887/83 Budget
Do Repairs			Do Hospital	2250	-	-	-			
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 -. Amount.	Grant, 187 -7 -. Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial			Civil Buildings—(Continued)							
Revenue										
Imperial										
Public Works	Public Works	Chingleput	Refitting Collectorate Cutchery							
Allowances	Establishment									
			Carried over ...							

MADRAS.

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 -. Amount.	Grant, 187 -7 -. Total.	Item No.	Remarks and References.
				Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial			Refitting Collectorate Cutchery and completing and Fencing							
Revenue										
Imperial										
Public Works	Public Works	Chingleput	Refitting Collectorate Cutchery							
Allowances	Establishment									
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF BUDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(Continued).
Provincial Service— Revenue— Provincial— Public— Establishment	Trichinopoly	Trichinopoly	Establishment of Collector and Assistant Collectors Office
Imperial Revenue— Land Revenue— Land Revenue	Trichinopoly	Trichinopoly	Establishment of Collector's Office
Public Works— Civil— Buildings	Trichinopoly	Trichinopoly	Improvements to Collector's Office Building
Imperial Revenue— Land Revenue— Land Revenue	Trichinopoly	Trichinopoly	Constructing a Treasury Room in Collector's Building
Imperial Revenue— Land Revenue— Land Revenue	Tanjore	Negapatam	Deputy Collector's Building ...

Carried over

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay. Actual to end of 187 -7.	Outlay. Probable during 187 -7.	Grant, 187 -7 -. Amount.	Grant, 187 -7 -. Total.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.		
2000	-	-	1000	5940	X	G.O. No. 981 dt. 27th Sept. 1880 Item No. 22, Class Estimate of 1880-81 Budget
4940	-	-	4940			G.O. No. 1238 dt. 12th May 1881 Item No. 23, Class Estimate of 1881-82 Budget
5960	-	-	5960			G.O. No. 1238 dt. 12th May 1881 Item No. 24, Class B Works of 1882-83 Budget
4000	-	-	4000			Estimate awaited.
				3760		
4,500	-	-	4000			G.O. No. 701 dt. 18th March 1880 Item No. 11, Class B Works of 1882-83 Budget.

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
					Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
			Civil Buildings—(Continued)							

Carried over ...

MADRAS.

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF T... DGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
Provincial Services— Imperial— Civil—			Brought forward ...
			Civil Buildings—(Continued).
			Additions to Medical Storehouse
			Additions and alterations to the District Munsiff's and Sub-Judge's Courts
Interest Deposits— Eastern Annuity			District Munsiff's Court
do Establishment			
			Total ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
2,850	.	.	2,850			G.O. No. 2 M. of 6th Jany 1879 Class No. 27, Class D. Works of 1882/83 Revenue
5,560	.	.	5,560			G.O. No. 2153 M. of 1st Aug 1882 Class Works of 1882/83 Revenue
1,780	.	.	1,780			G.O. No. 1298 M. of 10th May 1879 Class No. 29 Class D Works of 1882/83 Revenue
13,200	.	.	10,000			G.O. No. 582 M. of 4th Feby 1878 Class No. 30, Class D Works of 1882/83 Budget
11,300	.	.	11,300			G.O. No. 778 M. of 25th Sept 1877 Class No. 31, Class D Works of 1882/83 Budget

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF BUDGET ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(continued).
			Ditto
			Ditto
			Ditto
			Ditto
			Carried on

MADRAS.

OF MADRAS.

L

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7. Amount.	Grant, 187 -7. Total.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 (Continued).

Head of Classification	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 Amount.	Grant, 187 -7 Total.	Item No.	Remarks and References.
				Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Services— Provincial— 16 Jails	Salem & Ellore		Establishment							
	Tanjore	Kulitalai	Kulitalai Jail							
	Trichinopoly	Trichinopoly	Trichinopoly Jail and additions to the Trichinopoly Jail							
	Trichinopoly	Trichinopoly	Additions and Alterations to the Central Jail							
Police	Police	Mannarpoo	Police Station House							
	Residency	Madras	Combination of Marine Police Station							
	Trichinopoly	Trichinopoly	District Jail							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF T... IDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(Continued).
Provincial	Chingleput	Madras	General Hospital. Civil portion
Revenue—			Water Supply to
Criminal—			Constructing a Sin...
Medical	Jail	Madras	Barracks—
	Eastern Collectorate		Additions for Sub-Registrar's Office at
	Trichinopoly	Trichinopoly	the Talaqs Cutchery
			Additions and Cha...
	Presidency	Royapuram	Kaylan Hospital
Land Revenue	Tinnevelly	Palamcottah	Executive Engineer's
	Salt		Office with accom...
			modation for
Canyam	Cuttack		Officiating and other
			Civil Officers and Cutchery
Presidency	Royapuram		Additions for Sub-Registrar's Office
			Native Quarters for Sub-Division Office
			and Store
Trichinopoly	Pudukottai		Conveying Harmony from the Ground
— do —	Civil Stations		Land to the site of the new Ward
			Office at the Town Hall
			Additions for Sub-Registrar's Office at
			the Talaqs Cutchery
			Sub-Registrar's Office
			Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant 187 -7 Amount.	Grant 187 -7 Total.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.		
-	-	-	1,100			Estimate awaited.
2696	-	-	1696			G.O. No 1038 dated 16th October 1876 Item No 35 Class B Works of 1876/83 Rs. 2696 Estimate awaited
-	-	-	2000			
-	-	-	17,000			
2645	-	-	2645			G.O. No 839 of 16th October 1876 Item No 38 Class B Works of 1876/83 Rs. 2645 Received
-	-	-	1,000			Estimate awaited.
1750	-	-				G.O. No 1870 of 10th July 1876 and No 2211 of 29th August 1876 Item No 22. Class B Works of 1876/83 Rs. 1750 Received.
			2000			Estimate awaited
			27,191			— do —

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

DETAIL OF

Head of Classification.	Executive Division.	Locality.
Metalled and Bridged Roads	Salem	

GOVERNMENT

PART

UDGET-ESTIMATE FOR ORIGINAL WORKS

Project and Works.
Brought forward ...
~~Civil Buildings (Ordinary)~~
Communications
Salem and the head of the Jadaiur Ghat
Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187-7—(Continued).

Amount of Estimate.	Outlay.		Grant, 187-7.		Item No.	Remarks and References.
	Actual to end of 187-7.	Probable during 187-7.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
1200	-	-	1200			Est. No 1200 of 12th Office Pr. Item No 35 Class Abstracts of 1882/83 Budget

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

DETAIL OF T

Head of Classification.	Executive Division.	Locality.

GOVERNMENT

PART

ET-ESTIMATE FOR ORIGINAL WORKS

Project and Works.
Brought forward ...
Civil Buildings—(*Continued*).
Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

MADRAS.

DETAIL OF PART I.

BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7	Outlay. Probable during 187 -7	Grant, 187 -7 -. Amount.	Grant, 187 -7 -. Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
Public Works	South Circle	Cuddalore	Civil Buildings—(Continued).							G.O. No 1777 W dt 13.5.82
			Constructing Executive Officer	6200	—	—	6200			
			Carried over ...							

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF TI ET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Work.
			Brought forward ...
			Civil Buildings—(*Continued*).
			Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 .		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 .	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay.		Grant, 187 -7 -.		Item No.	Remarks and References.
					Actual to end of 187 -7 -.	Probable during 187 -7 -.	Amount.	Total.		
				Rs.	Rs.	Rs.	Rs.	Rs.		
			Brought forward ...							
			Civil Buildings—(*Continued*).							

Carried over ...

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF TE[illegible]DGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	[illegible]	Project and Works.
				Brought forward ...
				Civil Buildings—(Continued).
				Carried over ...

MADRAS.

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7		Item No.	Remarks and References.
	Actual to end of 187 -7	Probable during 187 -7	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 —(Continued).

Head of Classification.	Executive Division.	Locality.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 187 -7 .	Outlay. Probable during 187 -7 .	Grant, 187 -7 . Amount.	Grant, 187 -7 . Total.	Item No.	Remarks and References.
			Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.		
			Civil Buildings—(*Continued*).							

Carried over ...

MADRAS

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE

GOVERNMENT

PART

DETAIL BUDGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification	Executive Division.	Locality	M.	Project and Works.
				Brought forward ...
				Civil Buildings—(*Continued*).

Carried over ...

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MADRAS

OF MADRAS.

I.

UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 187 -7 - (Continued).

Amount of Estimate.	Outlay.		Grant, 187 -7 -		Item No.	Remarks and References.
	Actual to end of 187 -7 .	Probable during 187 -7 -	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT

PART

DETAIL OF T[illegible]DGET-ESTIMATE FOR ORIGINAL WORKS

Head of Classification.	Executive Division.	Locality.	Project and Works.
			Brought forward ...
			Civil Buildings—(*Continued*)
			Carried over ...

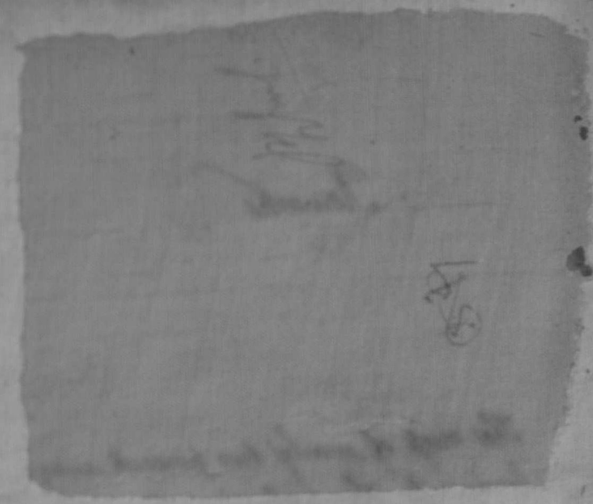
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Madras Public Works 1881-82

Service	Class	Ord. Works	Repairs	Total Outlay	Establishment	Percentage on Outlay	Remarks
		Rs	Rs	Rs	Rs		
Imperial	Military	1,13,574	2,17,097	3,30,671	98,181		
	Civil Buildings	1,92,037	4,003	1,96,040	64,311		The excess of nearly two percent may be said to be due to the inclusion of special charges on account of recoveries of advances made in England
	Miscellaneous Public Improvts	546	1669	2215			
	Barrack	-	-	-			
				5,82,925	1,62,492	27.82	
Provincial	Civil Buildings	390.175	1,16,701	506876			The excess under this head is chiefly due to a charge debited to Provincial in relief of Local Funds, erroneously charged in a previous year on account of the Kottaliyar bridge. The adjustment was effected in accordance with the instructions contained in Government Order No 1681 M. dated 6 July 82
	Communications	82,970	26038	109008			
	Miscellaneous Public Improvts	1150	5183	6333			
				6,22,217	706,784	13.43	
Incorporated Local Funds	Civil Buildings	4,716	1,501	6,217			
	Communications	70,646	137,092	207,738			
	Miscellaneous Public Improvts	13	5449	5462			
				219,417	23,625	10.76	Less than the prescribed percentage
Imperial Irrigation and Navigation Ordinary	Capital Account	4,32,298	-	4,32,298	34,430		
Provincial Irrigation and Navigation Ordinary	— do — do —	102,618	-	102,618	28,986		
Imperial Irrigation and Navigation Ordinary	Revenue Account	2475	68,850	71,325	26,858		
Provincial Irrigation and Navigation Ordinary	— do — do —	2845	61,503	64,348	22,649		
Irrigation and Navigation Works for which Capital and Revenue Accounts are not kept		1,64,745	6,13,752	7,80,497	2,10,890		
		1,81,521	1,61,592	2,62,113	82,096		
Agricultural Work Famine Relief Imperial Public Works	Capital Account	37,227	-	37,227	28,498		The excess is due to the debits under Establishment being made up of certain special charges in addition to the normal 25 percent charges
				14,62,526	4,27,157	29.20	
Productive Works	Irrigation Revenue	54,962	381,040	4,36,002	282,227		
	do Capital	2,25,090	-	2,25,090	51,785		
				6,61,092	2,36,012	4[illegible]	
	Total			35,48,137	11,03,023	31.7	

Note — The above figures represent the actuals of the year

D. C. Emerson
Examiner of Public Works Accounts
1.X.82



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Madras Public Works 1882-83

Divn.	Class	Gross Work.	Repairs	Total Outlay	Establishment	Percentage on Outlay	Remarks.
		Rs	Rs	Rs	Rs		
Imperial	Military	294397	273067	567464	115126		
	Civil Buildings	243276	11400	254676	58040		
	Mis. Pub. Impts.	-	-	-			
	Barracks	-	-	-			
				822340	173166	21·06	Less than the prescribed percentage
Provincial	Civil Buildings	913872	132090	1045962			Less than previous year. The grant for Establish-
	Communications	184096	43878	162974			ment under Provincial heads no fixed proportion
	Mis. Pub. Impts.	85059	8000	92059			to that for works and is dependent on the amount
				1331986	77258	5·80	contributed from other funds.
Imperial & Local Funds	Civil Buildings	-	-	-			
	Communications	84393	23961	60054			
	Mis. Pub. Impts.	-	-	-			
				60054	12156	20·24	Less than the prescribed percentage
Agricultural Works	Irrigation Works						
Famine Relief Protective Public Works	Capitals						
Productive Works	Irrigation Works						
	Capitals						

Note. The above figures under Imperial, Provincial and Local Funds correspond with the figures of the Regular Returns communicated by Civil to Government Public Works Department.

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Madras Public Works 1883-84

Service	Class	New Works	Repairs	Total Outlay	Establishment	Percentage on outlay	Remarks
		Rs	Rs	Rs	Rs	Rs	
Imperial	Military	22992	27500	49792	114588		
	Civil Buildings	192400	8000	200400			
	Miscellaneous Public Improvements	"	"	"	46094		
	Barrack	"	"	"	"		
				673392	160632	23.00	Less than the prescribed percentage
Provincial	Civil Building	106800	14000	120800			Less than previous years. The grant for Establishment under Provincial heads no fixed proportion to that for works and is dependent on the amounts contributed from other Funds
	Communications	14650	3000	17650			
	Miscellaneous Public Improvements	137000	39000	176000			
		57600	7000	64600			
				1015800			
				1450000	800000	55.17	
					792403		
Incorporated Local Funds	Civil Buildings	"	"	"			
	Communications	20000	"	20000			
	Miscellaneous Public Improvements	"	"	"			
				20000	4600	23.	Less than the prescribed percentage
Irrigation & Navigation Works. Ordinary	Capital Accounts	57034					
	Do Do	430850	93500	524350	85612	17.00	
	Revenue Accounts	253	7700	7953	1212	15.00	
	Do Do						
	Do Do						
	Do Do						
Agricultural Works Famine Relief Protective Public Works	Capital						
Productive Works	Irrigation Revenue	57343	5700	63043	10054	15.95	
	Capital						

Note. The above figures under Imperial, Provincial and Local Funds correspond with the figures of the Budget Estimate communicated by Secretary to Government Public Works Department

D. C. Cardew
Examiner P. W. Accounts

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	27,200	2,07,096	...	1,96,080	
32	34	EXECUTIVE BRANCH —*cont.*						
		Engineer Establishment —*cont.*						
		Executive Engineers—cont.						
4	4	Executive Engineer, 4th Grade.	550	2,200				
		Difference between the pay of an Executive Engineer, 1st Grade, and Consulting Architect to Government.	...	250				
		Military pay and allowances.	...	5,284				
36	38	Total, Executive Engineers.	...	34,934	4,19,208	...	3,74,568	
		Assistant Engineers.						
27*	28*	Assistant Engineer, 1st Grade.	450	12,600				
20	21*	Assistant Engineer, 2nd and 3rd Grade.	350 & 250 / 19 2	7,150				
		Military pay and allowances.	...	800				
			...	20,550	2,46,600	8,72,904	2,33,244	
47	49	Total, Assistant Engineers.	...	...	...	...	8,03,892	
92	97	Total, Engineer Establishment.	...	...	...	...		
		Deduct—						
		The pay of Consulting Engineer for Railways and his two Deputies, chargeable to Railway Imperial (4,224 × 12) = 50,694						
		Moiety of the pay and allowances of General Superintendent, Public Works Workshops, chargeable to Workshops (~~986~~ 1178 × 12) ... ~~11820~~ 14136				~~8394~~ 13394		
		Total for a year ... 54,714 ~~8394~~ 13394	...	...	...	~~8,18,190~~ 8,19,510	54,714	
92	97	Net Total, Engineer Establishment.	...	...	...	...	7,49,178	

*Includes two Special Officers for the Tank Maintenance Scheme.

As Capt Baddeley will be all available to us by end of Sept and be replaced by Mr Boyle the amount will probably be modified thereby Elsewhere

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*contd.*						
		Upper Subordinate Establishment.						
		Sub-Engineers.						
9	9	Sub-Engineer, 1st Grade ...	400	3,600				
9	9	Do. 2nd „ ...	300	2,700				
17	18*	Do. 3rd „ ...	250	4,500				
		Military pay and allowances.	...	435				* Includes one for Tank Maintenance Scheme.
35	36	Total, Sub-Engineers ...	...	11,235	1,34,820	...	1,31,220	
		Supervisors.						
22	22	Supervisors, 1st Grade ...	200	4,400				
...	...	Do. 2nd Grade ...	150	5,550				
		Military pay and allowances.	...	80				
58	59	Total, Supervisors ...	...	10,030	1,20,360	...	1,18,380	
		Overseers.						
28	29*	Overseers, 1st Grade ...	100	2,900				
28	29*	Do. 2nd „ ...	80	2,320				† Includes two for Tank Maintenance Scheme.
36	38†	Do. 3rd „ ...	60	2,280				
...	...	Military pay and allowances.	...	780				
92	96	Total, Overseers ...	...	8,280	99,360	...	92,376	
		Apprentices.						
...	5	Apprentice Supervisors ...	90	450				
...	5	Military Apprentice Overseers, 1st Grade.	80	400				
...	3	Apprentice Overseers, 2nd Grade.	60	180				
...	2	Do. 3rd Grade ...	40	80				
		Additional remuneration for two Apprentice Instructors.	50	100				
...	15	Total, Apprentices ...	...	1,210	14,520			
		Sub-divisional allowance for twenty Upper Subordinates.	30	600	7,200	...	3,600	
185	200	Carried over ...	...	...	3,76,260	...	3,45,576	

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

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PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Numbers.		Particulars of Charges.	Salary of Office.	Estimate for 1883-84.			Estimate for 1882-83.	Remarks.
1882-83.	1883-84.			Per Mensem.	Per Annum.	Total.		
			Rs.	Rs.	Rs.	Rs.	Rs.	
185	206	Brought forward ...	...	...	3,76,260	...	3,45,576	
		EXECUTIVE BRANCH—*cont.*						
		Upper Subordinate Establishment—*cont.*						
		Surveyors.						
4	5*	Surveyors	200	1,000				
4	5*	Do.	150	750				
4	5*	Do.	100	500				
4	5*	Do.	80	400				
4	5*	Do.	...	2,650	31,800		25,440	
16	20	Total, Surveyors ...	...	...	4,08,060		3,71,016	* One for Tank Maintenance Scheme.
201	226	Total, Upper Subordinate Establishment.	...	...	7,920		5,760	
		Deduct— The pay and allowances of a Sub-Engineer, 3rd Grade, two Supervisors, 2nd Grade, one of whom is a Sub-Conductor, and one Overseer, 2nd Grade, chargeable to Public Works Workshops (250 + 180 + 150 + 80) = 660.	...	...	...	4,00,140	3,65,256	
201	226	Net Total, Upper Subordinate Establishment.						
		Lower Subordinate Establishment.						Provision made for only half the year.
2	8	Sub-Overseers, 1st Grade ...	60	240				
...	8	Do. 2nd „ ...	40	160				
6	8	Do. 3rd „ ...	30	120				
8	24	Total, Lower Subordinate Establishment.	...	520	6,240	6,240	2,880	
		Petty Establishment.						
		Storekeepers.						
4	5	Storekeepers	30	150				
7	8	Do.	25	200				
8	6	Do.	20	120				
7	7	Do.	15	105				
26	26	Total, Storekeepers ...		575				

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GOVERNMENT OF MADRAS.

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PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		Petty Establishment —*cont.*						
...	10	For Kurnool Canal Division, *Vide* Office Note from the Secretary to Government, Public Works Department, No. 1481 D, dated 12th December 1882.	...	199				
			...	774	9,288	...	6,720	
26	36	*Medical Establishment.*						
1	...	Assistant Apothecary ...	...	...				
4	6	Hospital Assistants ...	25,55 & 60	275				
		Jeypore allowance for one ...	...	25				
		Potingy Ghât ,, ...	...					
		Charge allowance for two, 1 at 15 and the other at 10.	...	17				
9	3	Hospital Servants and Sweeper, 1 at 7, 1 at 6, 1 at 4.	...	3				
		Potingy Ghât allowance for one.						
			...	357½				
14	9	Total, Medical Establishment.	...	110				
...	4	Kurnool Canal Division, *Vide* Office Note from the Secretary to Government, Public Works Department, No. 1481 D, dated 12th December 1882.		467½	5,610	...	3,240	
14	13	*Maistries.*	40	40				
1	1	Maistry	25	25				
...	...	Maistries, 1st grade ...	20	20				
...	...	Do. 2nd ,, ...	15	15				
...	...	Do. 3rd ,, ...						
			...	100	1,200	...	480	
1	...	Total, Maistries ...	...	275	3,300			
...	11	Signallers for Kurnool Canal Division, *Vide* Office Note from Secretary to Government, Public Works Department, No. 1481 D, dated 12th December 1882.						
		Carried over ...						

* Provision made for only 6 months in the year—
It will be necessary to provide for the whole amount in the next year.

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GOVERNMENT OF MADRAS.

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PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83	Number. 1883-84	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Petty Establishment —*cont.*						
		Lascars and Sweepers, &c.						
500	509	Lascars	6	3,000				
5	5	Sweepers for Presidency Division.	3 at 3 & 2 at 5	19				
		Total, Lascars, &c. ...	...	3,019	36,228	...	36,228	
505	505	Total, Petty Establishment.	...	...	62,106	72,186	46,668	
		Office Establishment.						
		For Chief Engineer and Secretary to Government, Public Works Department.						
1	1	Chief Assistant	600	600				
1	1	Second do.	300	300				
...	1	Accountant, 2nd Grade ...	225	225				
1	1	Clerk, 1st Class, 3rd Grade.	140	280				
2	2	Do. 2nd „ 2nd „	110	110				
1	1	Do. 2nd „ 3rd „	70	280				
5	4	Do. 3rd „ 2nd „	55	165				
3	3	Do. 3rd „ 3rd „	45	135				
1	3	Do. 4th „ 1st „	35	70				
3	2	Do. 4th „ 2nd „	25	50				
2	2	Do. 4th „ 3rd „						
			...	2,510				
20	21							
...	1	Draftsman (200-250) ...		60	120			
2	2	Do. 1st Class ...		42½	42½			
1	1	Do. „ „						
			...					
3	4				38			
3	3	Attenders	15, 13 & 10	14	14			
1	1	Mushi	12 & 10		22			
2	2	Head Messengers	4 at 8; 3 at 7		53			
7	7	Messengers ...						
			...	127				
13	13		...			...	30,222	
36	38	Total, Public Works Secretariat Office Establishment.						

(X) Should not the Calculation of more than 190 for Mensum for the year

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Numbers. 1882-83.	Numbers. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		Lithographic Establishment.						
1	1	Superintendent	250	250				
1	1	Head Draftsman	120	120				
1	1	Second do.	100	80				
1	1	Third do.	80	60				
1	1	Fourth do.	60	40				
1	1	Fifth do.	40	30				
1	1	Sixth do.	30	25				
1	1	Seventh do.	25	20				
1	1	Eighth do.	20	15				
1	1	Ninth do.	15	10				
1	1	Tenth do.	10	25				
1	1	Tracer and Record-keeper.	25	16				
1	1	Do. do. ...	16	20				
1	1	Head Printer	20	12				
1	1	Second do.	12	12				
1	1	Third do.	12	18				
2	2	Pressmen	9	48				
6	6	Do.	8	14				
2	2	Do.	7	10				
2	2	Do.	5	35				
...	1	Clerk, 4th Class, 2nd Grade.	35					
28	29	Total, Lithographic Establishment.	...	960	11,520	...	11,100	
		For Chief Engineer and Joint Secretary to Government, Irrigation Branch.						
2	2	Clerks, 1st Class, 3rd Grade.	225	450				
1	1	Do. 2nd " 3rd " ...	110	110				
2	2	Do. 3rd " 1st " ...	90	180				
1	1	Do. 3rd " 2nd " ...	70	70				
2	2	Do. 3rd " 3rd " ...	55	55				
1	1	Do. 3rd " 1st " ...	45	90				
1	1	Do. 4th " 2nd " ...	35	105				
2	2	Do. 4th " 3rd " ...	25	25				
3	3	Do. 4th "						
1	1		...	1,085				
13	13		60	60				
1	1	Draftsman, 1st Class ...	42½	85				
2	2	Do. 2nd " ...	25	50				
2	2	Do. 3rd " ...	...	195				
5	5	Carried over ...		1280				

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83	Number. 1883-84	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For Chief Engineer and Joint Secretary to Government, Irrigation Branch —*cont.*						
1	1	Reference Picker	15	15				
...	1	Do.	8	8				
1	1	Muchi	10	10				
1	1	Head Messenger	8	8				
2	2	Messengers	7	14				
2	2	Do.	6	12				
3	3	Lascars	7	21				
10	11		...	88				
28	29	Total, Office Establishment for Chief Engineer for Irrigation.	...	1,368	16,416	...	16,260	
		For seven Superintending Engineers' Offices.						
	1	Clerk, 2nd Class, 1st Grade.	110	110				
...	1	Do. 2nd " 3rd "	...	...				
1	1	Do. 3rd " 2nd "	55	55				
1	...	Do. 3rd " 3rd "	45	45				
...	1	Do. 4th " 1st "	35	35				
1	1	Do. 4th " 2nd "	25	50				
1	1	Do. 4th " 3rd "	90	90				
2	2	Do. 4th "	60	60				
...	1	Draftsman, 80-100 ...	42½	42½				
1	1	Do. 1st Class ...	8	8				
1	1	Do. 2nd " ...	6	18				
1	1	Messenger						
3	3	Messengers	...	7				
12	14	Total for each office ...					31,572	* Includes office for a Special Officer for Investigation connected with the Tank Maintenance Scheme.
72	98*	Total for seven offices ...	...					
		For Presidency Division.						
		Clerk, 3rd Class, 2nd Grade.	70	70				
1	1	Do. 4th " 1st "	45	45				
1	1	Clerks, 4th " 2nd "	35	70				
2	2	Carried over ...						

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For Presidency Division —cont.						
3	3	Clerks, 4th Class, 3rd Grade.	25	75				
2	2	Do. 5th „ 1st „	17½	35				
1	1	Cashier (Clerk, 3rd Class, 2nd Grade).	70	70				
			60	60				
1	1	Draftsman, 1st Class ...	42½	42½				
1	1	Do. 2nd „ ...	25	75				
3	3	Do. 3rd „ ...	7	7				
1	1	Messenger ...	6	6				
1	1	Do.						
				555½	6,666	...	6,666	
		For Godavari Eastern Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	70	70				
1	2	Do. 4th „ 1st „	45	90				
1	1	Do. 4th „ 2nd „	35	35				
1	1	Do. 4th „ 3rd „	25	75				
3	3	Do. 4th „ 3rd „	60	60				
1	1	Draftsman, 1st Class ...	25	25				
1	1	Do. 3rd „ ...	7	7				
1	1	Messenger	6	6				
1	1	Do.						
				368	4,416	...	3,876	
10	11	Total, Office Establishment, Godávari Eastern Division.	...					
		For Kistna Eastern Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	70	70				
1	1	Do. 4th „ 1st „	45	45				
1	1	Do. 4th „ 2nd „	35	35				
1	1	Do. 4th „ 3rd „	25	75				
3	3	Do. 4th „ 3rd „	25	25				
1	1	Cashier (Clerk, 4th Class, 3rd Grade).	60	60				
1	1	Draftsman, 1st Class ...	25	25				
1	1	Do. 3rd „ ...	7	7				
1	1	Messenger	6	6				
1	1	Do.						
				348	4,176	...	4,176	
11	11	Total, Office Establishment, Kistna Eastern Division.	...					

GOVERNMENT OF MADRAS.

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PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Office Establishment —*cont.*						
		*For Eight First Class Divisions.**						* 1. Godávari Western. 2. Kistna Western. 3. Kurnool Canal. 4. South Arcot. 5. Buckingham Canal. 6. Tanjore. 7. Tinnevelly. 8. Coimbatore.
1	1	Clerk, 3rd Class, 2nd Grade.	70	70				
1	1	Do. 4th „ 1st „	45	45				
1	1	Do. 4th „ 2nd „	35	35				
2	2	Do. 4th „ 3rd „	25	50				
1	1	Draftsman, 1st Class ...	60	60				
1	1	Do. 3rd „ ...	25	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
9	9		...	298				
				8				
63	72	Total for eight offices ...	...	2,384	28,608	...	25,032	
		For Seven Second Class Divisions.†						† 1. Nellore. 2. Cuddapah. 3. North Arcot. 4. Chingleput. 5. Trichinopoly. 6. Negapatam. 7. Sangam Project.
1	1	Clerk, 3rd Class, 2nd Grade.	70	70				
1	1	Do. 4th „ 2nd „	35	35				
2	2	Do. 4th „ 3rd „	25	50				
1	1	Draftsman, 1st Class ...	60	60				
1	1	Do. 3rd „ ...	25	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
8	8	Total for each office ...	...	253				
				7				
73	56	Total for seven offices ...	...	1,771				
...	1	Add Cashier (Clerk, 4th Class, 1st Grade) for Sangam Project Division.	...	45				
...	57		...	1,816	21,792	...	27,864	
		For Nilgiri Division.						
...	1	Clerk, 3rd Class, 2nd Grade.	70	70				
...	1	Do. 4th „ 1st „	45	45				
...	2	Do. 4th „ 2nd „	35	70				
...	1	Draftsman, 1st Class ...	60	60				
...	1	Do. 2nd „ ...	42½	42½				
...	1	Messenger	9	9				
...	1	Do.	8	8				
...	8	Total, Office Establishment, Nilgiri Division.	...	304½	3,654	...	...	

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		*For Six Third Class Divisions.**						* 1. Ganjam. 2. Vizagapatam. 3. Bellary. 4. Salem. 5. Madura. 6. Kurnool.
1	1	Clerk, 3rd Class, 3rd Grade.	55	55				
1	1	Do. 4th „ 2nd „	35	35				
2	2	Do. 4th „ 3rd „	25	50				
1	1	Draftsman, 2nd Class ...	42½	42½				
1	1	Do. 3rd „ ...	25	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
8	8	Total for each office ...	...	220½				
			...	6				
48	48	Total for six offices ...	...	1,323	15,876	...	15,876	
		Office Establishment for Consulting Architect to Government.						
1	1	Clerk, 4th Class, 1st Grade.	45	45				
1	1	Draftsman and Estimator ...	145	145				
1	1	Do. 2nd Class ...	42½	42½				
1	1	Do. 3rd „ ...	25	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
6	6	Total, Office Establishment for Consulting Architect to Government.	...	270½	3,246	...	3,246	
		For Public Works Stores.						
1	1	Clerk, 2nd Class, 2nd Grade.	140	140				
1	1	Do. 3rd „ 2nd „	70	70				
1	1	Do. 4th „ 2nd „	35	35				
1	1	Do. 4th „ 3rd „	25	25				
1	1	Messenger	8	8				
1	1	Do.	7	14				
2	2	Do.	6½	13				
9	9	Total, Office Establishment, Public Works Stores.	...	305	3,660	...	3,660	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Numbers.		Particulars.	Salary of Office.	Estimate for 1883-84.			Estimate for 1882-83.	Remarks.
1882-83.	1883-84.			Per Mensem	Per Annum.	Total.		
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		Office (Toll) Establishment, Buckingham Canal.						
3	3	Clerks, 4th Class, 2nd Grade	35	105				
7	7	Do. 4th „ 3rd „	25	175				
9	9	Do. 5th „ 1st „	17½	157½				
2	2	Do. 5th „ 2nd „	12½	25				
1	1	Lascar	8	8				
22	22	Lascars	7	154				
25	25	Do.	6	150				
69	69	Total, Office (Toll) Establishment, Buckingham Canal	...	774½	9,294	...	9,294	
		For three Project Divisions.						
2	2	Draftsmen, 1st Class ...	60	120				
2	2	Do. 2nd „ ...	42½	85				
1	1	Clerk, 4th Class, 2nd Grade.	35	35				
1	1	Do. 5th „ 1st „	17½	17½				
1	1	Messenger	7	7				
1	1	Do	6	6				
8	8	Total for each Project Division Office.	...	270½				
				3				
24	24	Total for three offices ...	...	811½				
		For D Project Division.						
2	2	Draftsmen, 1st Class ...	60	120				
2	1	Do. 2nd „ ...	42½	42½				
...	1	Do. 3rd „ ...	25	25				
...	1	Clerk, 3rd Class, 3rd Grade.	55	55				
1	...	Do. 4th „ 2nd „	...	...				
1	...	Do. 5th „ 1st „	...	...				
1	1	Messenger	7	7				
1	1	Do.	6	6				
8	7	Total, Office Establishment, D Project Division.	...	255½				
32	31	Total, Office Establishment, Project Division Offices.	...	1,067	12,804	...	12,984	

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Office Establishment —*cont.*						
		For Fifty-five Sub-divisional Offices.						
1	1	Clerk, 4th Class, 3rd Grade.	25	25				
1	1	Messenger	6	6				
2	2	Total for each Sub-divisional office.	...	31				
110	110	Total for 55 offices ...	...	1,705	20,460	...	18,600	
		For Eighty-two Detached Officers.						
1	1	Clerk, 4th Class, 3rd Grade.	25	25				
1	1	Total for each Detached Officer.	...	25				
				82				
88	82	Do. for 82 officers ...	...	2,050	24,600	...	26,400	
		For Ninety-one Overseers.						
1	1	Clerk, 5th Class, 1st Grade.	17½	17½				
1	1	Total for each Overseer ...	...	17½				
				91				
92	91	Total for ninety-one Overseers.	...	1,592½	19,110	...	19,320	
		Abstract of Office Establishment.						
36	38	Public Works Department Secretariat.	...	...	36,324	...	30,222	
					10,920			
28	29	Lithographic Establishment	...	...	11,520	...	11,100	
28	29	Office of Chief Engineer for Irrigation.	...	...	16,416	...	16,260	
					58,254			
72	98	Nine Superintending Engineers' Offices.	...	...	6,666	...	6,666	
17	17	Presidency Division Office.	...	...	4,416	...	3,876	
10	11	Godávari Eastern Division Office.	...	...	4,176	...	4,176	
11	11	Kistna Eastern Division Office.	...	...	28,608	...	* 25,032	* For seven 1st Class Divisions. →
63	72	Eight 1st Class Division Offices.	...	...				
		Carried over ...						

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
73	57	Seven 2nd Class Division Offices.	...	...	21,792	...	* 27,864	* For nine 2nd Class Divisions.
...	8	Nilgiri Division Office ...	...	...	3,654	...	...	
48	48	Six 3rd Class Division Offices.	...	...	15,876	...	15,876	
6	6	Office of Consulting Architect to Government.	...	...	3,246	...	3,246	
9	9	Office Establishment, Public Works Stores.	...	...	3,660	...	3,660	
69	69	Toll Establishment, Buckingham Canal.	...	...	9,294	...	9,294	
32	31	4 Project Division Offices.	...	...	12,804	...	12,984	
100	110	55 Sub-divisional Offices ...	...	...	20,460	...	† 18,600	† For 50 Sub-divisional Officers.
88	82	82 Detached Officers ...	...	...	24,600	...	‡ 26,400	‡ For 88 Detached Officers.
92	91	91 Overseers	...	...	19,110	...	§ 19,320	§ For 92 Overseers.
782	814	Total, Office Establishment.	...	...	3,00,846	...	2,66,148	
		IRRIGATION (CONSERVANCY) ESTABLISHMENT INCLUDING THAT FOR THE KURNOOL CANAL.						
		Godâvari Delta System.						
		Water Regulation Establishment.						
			120	120				
1	1	Anicut Superintendent ...	18	18				
1	1	Do. Maistry	15	15				
1	1	Do. do.	12	12				
1	1	Do. do.	15	45				
1	1	Do. do.	10	10				
3	3	Clerks	70	350				
1	1	Shroff	55	550				
5	5	Delta Superintendents ...	40	480				
10	10	Do. do. ...	8	40				
12	12	Do. do. ...	6	6				
5	5	Superintendents	5	15				
1	1	Peon	6	216				
3	3	Peons	5	375				
36	36	Lascars						
75	75	Do.	...	2,252				
155	155	Total, Water Regulation Establishment, Godâvari Delta System.						

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MADRAS

Kistna Delta Superintendency

Delta Registration Establishment.

1	1	Assistant Superintendent	120	120
1	1	Senior do do	40	40
1	1	Clerk Veltaru [illegible]	17½	17½
1	1	Clerk Veltaru [illegible]	12½	12½
-	1	[illegible]		
3	3	Delta Superintendents Establishment	55	165
10	3	[illegible]	40	320
16	8	[illegible]	8	144
17	18	Sircars	7	126
17	18	[illegible]	6	156
25	26	[illegible]	5	135
29	27	[illegible]		
	1	Registering Clerk	17½	17½
		Village Accountant	20	
1	1	Senior Monistry	12	
1	1	Clerk	15	
1	1	[illegible]		
				1,463½
106	128	Kistna Delta Registration Establishment		

Settlement Superintendent

Settlement Establishment

Settlement Establishment

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Irrigation (Conservancy) Establishment including that for the Kurnool Canal—*cont.*						
		Godáveri Delta System —cont.						
		Navigation Establishment.						
1	1	Boat Superintendent ...	116	116				
2	2	Lock Superintendents ...	15	30				
15	15	Do. do. ...	12	180				
19	19	Do. do. ...	10	190				
1	1	Do. do. ...	9	9				
12	12	Do. do. ...	8	96				
135	135	Lock Lascars	6	810				
72	72	Do.	5	360				
		1 Superintendent (increase of pay to Nundamur Weir Superintendent.)	4	4				
257	257	Total, Navigation Establishment, Godávari Delta System.	...	1,795				
		Kistna Delta System.						
		Water Regulation Establishment.						
1	1	Anicut Superintendent ...	120	120				
3	3	Delta Superintendents ...	70	210				
5	5	Do. ...	55	275				
6	6	Do. ...	40	240				
1	1	Anicut Maistry	30	30				
1	1	Clerk	15	15				
1	1	Do.	12	12				
17	17	Lascars	8	136				
17	17	Do.	7	119				
25	25	Do.	6	150				
29	29	Do.	5	145				
106	106	Total, Water Regulation Establishment, Kistna Delta System.	...	1,452				
		Navigation Establishment.						
3	3	Lock Superintendents ...	15	45				
8	8	Do. ...	12	96				
8	8	Do. ...	10	80				
		Carried over ...		221				

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Numbers. 1882-83	Numbers. 1883-84	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		Brought forward ...	Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation (Conservancy) Establishment including that for the Kurnool Canal—*cont.*						
		Kistna Delta System—cont.						
		Navigation Establishment —cont.						
15	15	Lascars	8	112				
17	17	Do.	7	98				
21	21	Do.	6	126				
17	17	Do.	5	110				
1	1	Traffic Clerk	12	24				
		Boat Clerk [illegible]	17½	17½				
90	90	Total, Navigation Establishment, Kistna Delta System.	...	693				
		Penner Anicut System.						
		Water Regulation Establishment.						
1	1	Anicut Superintendent ...	60	60				
1	1	Delta do. ...	70	70				
1	1	Clerk	15	15				
1	1	Do	10	10				
1	1	Lascar	7	7				
17	17	Do.	6	102				
4	4	Do.	5	20				
26	26	Total, Water Regulation Establishment, Penner Anicut System.	...	284				
		Cauvery Delta System.						
		Water Regulation Establishment.						
1	1	Superintendent	17½	17½				
3	3	Do.	15	45				
2	2	Do.	12	24				
4	4	Do.	10	40				
6	6	Do.	8	48				
1	1	Do.	7	7				
15	15	Lascars	6	90				
26	26	Do.	5	130				
86	86	Do.	4	344				
144	144	Total, Water Regulation Establishment, Cauvery Delta System.	...	745½				

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Irrigation (Conservancy) Establishment including that for the Kurnool Canal—*cont.*						
		Cauvery Delta System—cont.						
		Navigation Establishment.						
1	1	Superintendent	8	8				
1	1	Lascar	5	5				
2	2	Total, Navigation Establishment, Cauvery Delta System.	...	13				
		Srivaikuntham Anicut System.						
		Water Regulation Establishment.						
2	2	Maistries	30	60				
1	1	Superintendent	12	12				
21	21	Lascars	5	105				
24	24	Total, Water Regulation Establishment, Srivaikuntham Anicut System.	...	177				
		Chembrambakam Tank.						
		Water Regulation Establishment.						
1	1	Superintendent	12	12				
1	1	Do.	10½	10½				
2	2	Lascars	6	12				
5	5	Do.	5	25				
9	9	Total, Water Regulation Establishment, Chembrambakam Tank.	...	59½				
		Madras Water-Supply and Irrigation Project.						
1	1	Superintendent	25	25				
1	1	Do.	15	15				
4	4	Lascars	7	28				
2	2	Do.	6	12				
4	4	Do.	5	20				
12	12	Total, Madras Water-Supply and Irrigation Project.	...	100	...	...	...	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Irrigation (Conservancy) Establishment including that for the Kurnool Canal—*cont.*						
		Pálár Anicut System.						
		Water Regulation Establishment, Chingleput District.						
				20	20			
1	1	Maistry		6	12			
2	2	Lascars		4	48			
12	12	Do.						
		North Arcot District.						
				25	25			
1	1	Superintendent		15	15			
1	1	Do.		12	36			
3	3	Do.		4½	67½			
15	15	Lascars			223½			
35	35	Total, Water Regulation Establishment, Pálár Anicut System.	...					
		Pelandorai Anicut System.						
		Water Regulation Establishment.						
				30	30			
1	1	Superintendent		8	8			
1	1	Lascar		6	12			
2	2	Do.		5	35			
7	7	Do.			85			
11	11	Total, Water Regulation Establishment, Pelandorai Anicut System.	...					
		Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept.						
		Water Regulation Establishment, Ganjam District.						
				7	21			
3	3	Lascars		4	56			
14	14	Do.		3½	3½			
1	1	Do.			80½			
18	18	Total, Water Regulation Establishment, Ganjam District.	...					

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept—*cont.*						
		Vizagapatam District.						
3	3	Superintendents	12	36				
13	13	Lascars	5	65				
16	16	Total, Water Regulation Establishment, Vizagapatam District.	...	101				
		Godâvari District.						
1	1	Lascar	9	9				
1	1	Do.	7	7				
2	2	Total, Water Regulation Establishment, Godâvari District.	...	16				
		Chingleput District.						
1	1	Superintendent	10½	10½				
1	1	Lascar	6	6				
1	1	Do.	5	5				
3	3	Total, Water Regulation Establishment, Chingleput District.	...	21½				
		South Arcot District.						
1	1	Superintendent	40	40				
1	1	Do.	35	35				
1	1	Do.	25	50				
2	2	Do.	20	40				
2	2	Do.	8	80				
10	10	Lascars	6	54				
9	9	Do.	5	140				
28	28	Do.						
53	53	Total, Water Regulation Establishment, South Arcot District.	...	439				
		North Arcot District.						
1	1	Superintendent	27	27				
2	2	Do.	20	40				
		Carried over ...						

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Irrigation and Navigation Works for which neither Capital for Revenue Accounts are kept—*cont.*						
		North Arcot District—cont.						
1	1	Superintendent	12	12				
1	1	Do.	10	10				
5	5	Lascars	6	30				
15	15	Do.	5	75				
25	25	Total, Water Regulation Establishment, North Arcot District.	...	194				
		Coimbatore District.						
1	1	Superintendent	5	5				
4	4	Lascars	2½	10				
5	5	Total, Water Regulation Establishment, Coimbatore District.	...	15				
		Malabar District.						
1	1	Watchman	4	4				
1	1	Do.	3	3				
		Additional amount sanctioned.	...	11½				
2	2	Total, Water Regulation Establishment, Malabar District.	...	18½				
		Tanjore District.						
1	1	Superintendent	15	15				
1	1	Lascar	6	6				
1	1	Do.	5	5				
6	6	Do.	4	24				
9	9	Total, Water Regulation Establishment, Tanjore District.	...	50				

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		IRRIGATION AND NAVIGATION WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT—*cont.*						
		Trichinopoly District.						
1	1	Superintendent	15	15				
1	1	Do.	12	12				
2	2	Do.	10	20				
1	1	Lascars	6	6				
5	5	Do.	5	25				
18	18	Do.	4	72				
4	4	Do.	3	12				
32	32	Total, Water Regulation Establishment, Trichinopoly District.	...	162				
		Madura District.						
4	4	Lascars	4	16				
4	4	Total, Water Regulation Establishment, Madura District.	...	16				
		Tinnevelly District.						
1	1	Superintendent	45	45				
2	2	Do.	35	70				
4	4	Do.	30	120				
7	7	Lascars	8	56				
23	23	Do.	6	138				
23	23	Do.	5	115				
60	60	Total, Water Regulation Establishment, Tinnevelly District.	...	544				
		NAVIGATION ESTABLISHMENT.						
		South Arcot District.						
1	1	Superintendent	15	15				
1	1	Do.	10	10				
1	1	Lascar	8	8				
7	7	Do.	5	35				
10	10	Total, Navigation Establishment, South Arcot District.	...	68				

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GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number 1882-83.	Number 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH —*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	
		Agricultural Works. River Conservancy Establishment.						
		Godávari District.						
2	2	Superintendents	15	30				
4	4	Lascars	6	24				
6	6	Total, River Conservancy Establishment, Godávari District.	...	54				
		South Arcot District.						
3	3	Lascars	8	24				
6	6	Do.	5	30				
9	9	Total, River Conservancy Establishment, South Arcot District.	...	54				
		Trichinopoly District.						
2	2	Lascars	7	14				
20	20	Do.	4	80				
4	4	Do.	3	12				
10	10	Do.	2½	25				
36	36	Total, River Conservancy Establishment, Trichinopoly District.	...	131				
1161	1161	Total, Conservancy Establishment.	...	~~9,884~~ 9879	~~1,18,608~~ 118548		1,22,947	
		Conservancy Establishment, Kurnool Canal Division.						
		Irrigation.						
...	3	Irrigation Superintendents.	40, 55 & 70	165				
...	4	Anicut do. ...	15, 20 & 25	75				
...	10	Head Lascars	8	80				
...	15	Lascars	7	105				
...	17	Do.	6	102				
...	13	Do.	5	65				
...	3	Lascars for 3 Irrigation Superintendents.	6	18				
...	65	Total, Irrigation, Kurnool Canal Division.	...	610				

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—*continued.*

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH —*cont.*						
		AGRICULTURAL WORKS. RIVER CONSERVANCY ESTABLISHMENT—*cont.*						
		Conservancy Navigation, Kurnool Canal Division.						
	7	Lock Superintendents ...	12	84				
	15	Do. do. ...	10	150				
	20	Do. do. ...	8	160				
	42	Total, Conservancy Navigation Establishment, Kurnool Canal Division.	...	394				
...	...	Total, Conservancy Establishment.	...	...				
107		Kurnool Canal Division ...	...	1,004	*12,048	...	...	* Excludes 91 Lascars for 8 months at 6 and 7. 45 at 7 = 315 46 at 6 = 376 91 591 × 8 = 4,728 to be provided for from Temporary Establishment.
		Special Revenue Investigation by Mr. Wilson.						
		Office Establishment required for the preparation of Irrigation accounts.	...	...	†13,000	...	13,000	† Office Note from the Secretary to Government, Public Works Department, Irrigation Branch, No. 300, dated 13th December 1882.
		Total, Irrigation Establishment.	...	...	~~1,49,036~~ 1,03,096	...	1,35,947	
		TEMPORARY ESTABLISHMENT.	...	...	1,00,000	...	25,000	
		Local Allowances.						
		Upper Godávari allowance ...	...	15	180			
		Wynaad allowance ...	...	...	1,200			
		Potingy Ghát allowance ...	...	...	7,000			
		Presidency house-rent ...	...	800	9,600			
		Do. allowance ...	...	800	9,600			
		Total, Local Allowances ...	...	...	27,580	...	24,800	
		Travelling Allowances.	...	...	...	2,06,000	2,00,000	
		Carried over ...						

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...						
		EXECUTIVE BRANCH —*cont.*						
		Temporary Establishment—*cont.*						
		Contingencies inclusive of Postage.						
		Public Works Secretariat ... Rs. 500						
		Office of Chief Engineer for Irrigation. 150						
		7 Superintending Engineers' Offices.	...	4,150	49,800	48,600	48,600	
		26 Divisional Offices.						
		33 Offices at Rs. 100 per mensem ... 3,300						
		Four Project Divisions at Rs. 50 per mensem ... 200						
		Abstract of the foregoing.						
		Engineer Establishment ...	...	...	8,18,190	...	7,49,178	
		Upper Subordinate do. ...	...	...	4,00,140	...	3,65,256	
		Lower do. do. ...	...	...	6,240	...	2,880	
		Petty Establishment ...	...	...	82,106	...	46,668	
		Office do. ...	...	...	3,00,840	...	2,66,148	
		Irrigation do. ...	...	...	1,43,056	...	1,35,947	
		Temporary do. ...	...	...	1,00,000	...	25,000	
		Local allowances	...	...	27,580	...	24,800	
		Total, Salaries ...	...	...	18,58,158	18,58,158	16,15,877	
		Travelling allowances ...	...	...	...	2,06,000	2,00,000	
		Contingencies	...	...	...	49,800	48,600	
		Grand Total, Executive Branch.	...	...	...	21,13,958	18,64,477	
		ACCOUNTS BRANCH.						
		Examiner's Establishment.						
1	1	Examiner, 3rd Class ...	1,100	1,100				
2	2	Deputy Examiners ...	450 & 550	1,000				
1	1	Assistant Examiner, 2nd Grade.	250	250	2,350	28,200	29,400	
4	4	Total, Examiner's Establishment.	...					

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		ACCOUNTS BRANCH —*cont.*						
		Examiner's Establishment—*cont.*						
		Accountants.						
2	2	Accountants, 1st Grade ...	400	800				
3	*3	Do. 2nd " ...	295	885				* Excluding one Accountant, 2nd Grade, attached to the Public Works Department Secretariat.
6	6	Do. 3rd " ...	200	1,200				
17	17	Do. 4th " ...	115	1,955				
30	30	Do. 5th " ...	57½	1,725				
58	58	Total, Accountants ...	...	6,565	78,780	...	78,780	
		Office Establishment including that sanctioned for Capital and Revenue Accounts and Code Works.						
		Clerks.						
1	1	Clerk, 2nd Class, 2nd Grade.	140	140				
1	1	Do. 3rd " 1st "	90	90				
3	4	Do. 3rd " 2nd "	70	280				
5	7	Do. 3rd " 3rd "	55	385				
6	6	Do. 4th " 1st "	45	270				
6	10	Do. 4th " 2nd "	35	350				
11	16	Do. 4th " 3rd "	25	400				
3	9	Do. 5th " 1st "	17½	157½				
36	54	Total, Clerks ...	...	2,072½				
		Menial Servants.						
		Moochi	10	10				
1	1	Do.	8	8				
1	1	Attender	5	5				
...	1	Head Messenger	10	10				
1	1	Do.	8	8				
1	1	Messengers	7	28				
4	4	Do.	6	36				
6	6	Do.	5	10				
2	2	Rollers		115				
16	17	Total, Menial Servants ...	...	2,187½	26,250	...	19,590	
52	71	Total, Office Establishment.	...					
		Temporary Establishment ...	...	...	...	...	9,600	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		ACCOUNTS BRANCH —*cont.*						
		Local and Charge Allowances.						
		Presidency house-rent ...	...	500				
		Do. allowance ...	...	1,200				
		Charge allowance for 20 5th Grade Accountants.	...	400				
		Total, Local and Charge Allowances.	...	2,100	25,200	...	25,200	
		Total Salaries	...	...	1,58,430	1,58,430	1,62,570	
		Travelling allowances ..	...	300	3,600	3,600	3,600	
		Contingencies	...	400	4,800	4,800	4,800	
		Grand Total ...	...	...	...	1,66,830	1,70,970	
		Deduct contributions for two Accountants as follows:—						
	1	Madras Harbour Works ...						
	1	Dowlaishweram Workshops ...						
	2	Total ...	...	...	...	4,044	5,160	
		Net Total, Accounts Branch.	...	...	...	1,62,786	1,65,810	
		Abstract.				21,13,118		
						~~21,13,958~~	18,64,477	
		Executive Branch	...	...	...	1,62,786	1,65,810	
		Accounts do.	...	...	...			
		Total, Public Works Department Establishment.	...	...	...	~~22,76,741~~ 22,75,904	20,30,287	

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Provincial Services
Public Work, Budget Estimate
Government of Madras.
Part III Continued.

Abstract of the Foregoing Provision for Establishments

Number 1882-83	Number 1883-84	Particulars.	Salary of Office	Estimate for 1883-84. Per Mensem	Per Annum	Total	Estimate for 1882-83.	Remarks.
			Rs.	Rs	Rs.	Rs.	Rs	
		Abstract						
		Executive Branch ..		2113.118				
		Accounts Branch .		162.786				
		Total P.W. Establishment		22.75.904	22.75.904			197
		Probable Savings						
		Deduct Contributions from Capital Productive Public Works		250621				
		Productive Public Works Revenue Account		531.835				
		Irrigation and Navigation and Agricultural Works		27712				
		Imperial Military Works		115761				
		Imperial Postal Services		46094				
		Incorporated Local Funds		8190				
		Excluded Funds		7165				
		Irrigation under Provincial		112123				
		Irrigation under Provincial						
		Govt of India Contribution						
		from the General Grant for						
		Protection of Public Works		123500				
		Work done by Lithographic Branch of the Public Works Secretariat		6000	73501			
		Balance from Provincial				8.02.403		

Provincial Services — Madras

Public Works Budget Estimate

Government of Madras.

Part IV.

Detail of the Budget Estimate for Tools and Plant under Provincial Services in Madras for the year 1883-84.

Division	Surveying and Office Establishment Rs	Machinery Rs	Tools Rs	Plant Rs	Office Furniture Rs	Camp Equipage Rs	Live Stock Rs	Repairs and Carriage Rs	Total 1883-84 Rs	Estimate 1882-83. Rs.
Ganjam									500	600
Vizagapatam									1000	500
Godavari Eastern									8235	4184
Do. Western									1200	1000
Kistna Eastern									600	
Do. Western									9000	1847
Nellore									256	250
Bellary									2300	2300
Cuddapah									1500	1000
Kurnool									1000	1000
N.W. Coast									2000	1000
Coimbatore									170	
Salem									535	600
North Arcot									848	300
South Arcot									2400	2600
Chingleput									500	600
Providency									2300	2166
Trichinopoly									2000	2000
Tanjore									1500	1500
Negapatam									1220	1175
Tinnevelly									3800	3300
Madura									1000	1000
Consulting Architect									1500	1000
Increase of Capitation to the Dockyard Workshops									45000	"
Chief Superintendent Pu. Stores									"	"
Special Plant Reserve at the disposal of Government									6500	8600
									"	"
									5301	27627
Total									57709	70397
London Supplies									67291	37603
Grand Total									125000	107997

Tools & Plant (Detail)

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Abstract of the foregoing Provision for Tools and Plant.

	Rs.	Rs.
Total of the details shown above.		
Distribution of the above:		125,000
Contribution from Imperial Military Works at 8½ per cent on the grant for works	7,452	
Do Do. Other Services	3006	
Do Do. from Imperial Irrigation and Navigation and Agricultural Works	17,528	
Do from Imperial Capital Productive Public Works	16,346	
Do from Imperial Productive Public Works, Revenue Account	9,459	
Do from Imperial Local Funds	1,650	
Do Incorporated Local Funds	467	
Do Excluded Funds.		
Do from Provincial Irrigation and Navigation Works	4,135	
Do Provincial Public Works	450	
		62,793

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Balance to be provided from Provincial 62,207

Mr. & Pl. L. (Telegraphs)

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Part VI.

Abstract of the probable increase or decrease in the Suspense balances for 1881-82 and provided for in the Ordinary Provincial Service Budget Estimate of the year.

	Stock	Stock Purchases and Sales	Miscellaneous Advances	London Stores	London Invoices	Total
Actual Balance on 1st April 1881.	6,44,844	18,061	54,267	10,590	-91	7,27,671
Probable charges during 1881-82.	7,20,156	69,339	2,59,633	12,410	6,991	10,68,529
Total.	13,65,000	87,400	3,13,900	23,000	6,900	17,96,200
Probable credits or issues including Sales and Cash receipts during 1881-82.	7,68,200	1,06,400	1,86,100	23,000	6,900	10,90,600
Probable balance on 1st April 1882	5,96,800	-19,000	1,27,800	"	"	7,05,600
Probable charges during 1882-83	5,21,100	2,05,600	3,65,200	8,400	9,900	11,10,200
Total	11,17,900	1,86,600	4,93,000	8,400	9,900	18,15,800
Probable credits or issues including Sales and Cash receipts during 1882-83	5,51,700	1,99,400	3,13,300	8,400	9,900	10,82,700
Probable balance on 31st March 1883	5,66,200	-12,800	1,79,700	"	"	7,33,100
Results of operations of 1882-83 viz.						
Increase	"	6,200	51,900	"	"	58,100
Decrease	30,600	"	"	"	"	30,600
Net.	-30,600	6,200	51,900	"	"	27,500

Madras
2nd December 1882

A. Govindoo
Examiner Public Works Accounts

Provincial Services — Madras

Public Works Budget Estimate

Government of Madras

Appendix A.

Distribution of the grants for 1882-83 under provincial services arranged By Departments and objects of Works.

	Major original Works	Minor Works	Repairs	Total	Establishment	Tools and Plant	Stock and Contingencies	Total 1883-84	Estimate 1882-83
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs.
Civil Buildings									
Provincial Services									
Imperial Administration	~~257,810~~ 261,810				65				
Minor Departments	6615								
Law and Justice	~~130,218~~ 130,218								
Ecclesiastical	"				203				
Provincial Services									
Jails	171,813								
Police	18,570								
Educational	"								
Medical	67,760								
Miscellaneous	115,635								
Total Civil Buildings	~~786,540~~ 790,540								
Communications									
Metalled and bridged roads	114,630								
Navigable Canals	"								
Total Communications	114,630								
Miscellaneous Public Improvements	55,400								
Harbours and Navigation	"								
Total	~~2,530,782~~ 2,534,782	~~277,166~~ 277,000		~~13,677,584~~ 13,677,584	~~40,298~~ 40,298	6420	27,580	1300,000	22,11,216
	~~5,56,776~~ 5,56,776	2,85,12			2403				

Department
Distribution

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Appendix D.

Estimated account of Receipts and charges of the Buildings and Roads Branch Public Works Department Madras for the Year 1892-93 and the Year 1893-94.

Accounts	Budget Estimate	Regular Estimate
To Balance	20,000	21,187
Cheques of Public works Department offices	6,28,469	6,50,976
Provincial Service Receipts	2,00,000	163,000
Local Funds Receipts	.	500
Subscription to service Funds	10,833	9,306
Subscription to General Family Pension Funds	363	1363
Subscription to Guards annuity Funds	.	.
Gain by Exchange	47,600	29,268
Guaranteed Railways	.	.
Payment for Lands for Public Works	100,900	61,609
Supplies from Forest Department	2806	5,819
Transfers Miscellaneous	626,092	361,106
Central adjusting account	22,114	11,103
Telegraph Department		218
Transfers of the Public Works Department	17,12,370	16,96,722
London account Stores	2,13,337	1,16,329
London account Miscellaneous	13,096	19,000
Imperial Revenue Receipts (Military)	30,000	30,000
Imperial Revenue Receipts other services	.	.
Deposits Ordinary	2,01,706	2,09,605
Deposits contributions	18,960	11,422
Treasure advances	.	.
Barracks Supplies	.	.
Famine Relief works	.	.
Total	9,89,070	9,23,204
	9,41,570	

Accounts	Budget Estimate	Regular Estimate
By Payments into Treasuries by Officers of the Public Works Department	57,267	60,014
Provincial Service Expenditure	2,27,000	2,43,500
Local Funds Expenditure	64,682	130,902
Expenditure against Local Loans	.	.
Guaranteed Railways	.	.
Famine Relief	.	.
Supplies to Forest Department	.	.
Other Public Works Revenue realized in the Civil Dept.	16,702	16,417
Miscellaneous Receipts of Public works realized in the Civil Department	9,412	6,911
Contributions in aid of Public Works	6,786	6,736
Transfers Miscellaneous	4,80,200	4,34,976
Central adjusting account	29,980	43,330
Telegraph Department	114	114
Transfers of Public Works Department	20,64,716	19,09,000
Net Expenditure against Imperial Budget grant for Military Works	6,20,000	6,90,000
for other Services	2,19,000	2,16,701
Madras Harbor Works	567,000	567,000
Deposits Ordinary	2,10,959	2,07,691
Deposits contributions	12,179	10,101
Treasure advances	.	.
Barracks Supplies	.	.
Famine Relief Works	.	.
Balance	20,000	20,000
Total	9,89,070	9,23,204

Madras
17th December
1892

Examined & Accounts Officer

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Preliminary Scene

Madras

Provincial Services
Public Works Budgets - Estimates.

7

Public Works Department

Provincial Service Budget - Estimate
of the
Public Works Department
of the
Government of Madras
for the year
1882-83.

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Chepauk
10th January 1882.

Signed / R.H. Lankey, Col.
R.E.
Secretary to Government
P.W.D.

Provincial Services
Public Works Budget-Estimates. Madras

Contents

Budget-Estimate of Revenue under Provincial Services....
" " Expenditure .. " " "
Details of Budget-Estimates under Expenditure .. —
Part I — Details of Estimate for Original Works Class A.
" ~~II~~ I " " " " Class B.
" II " " " Repairs.
" III " " " Establishment Contingencies
" IV " " " Tools and Plant
" V " " " Stock and Suspense
" VI " " "
Appendices to above.
Appendix A — Distribution of the Grant by Departments
" D — Estimated Account of total receipts and total Expenditure of the Province for the year 1881-82 and 1882-83.

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Provincial Services. Revenue. (1) Madras.
Public Works Budget Estimate

Government of Madras.

Budget Estimate of Provincial Services Public Works Revenue in Madras for the year 1883-84.

Budget Estimate of the Revenue that will be realized by and on account of Provincial services of the Public Works Department in Madras for the year from 1st April 1883 to 31st March 1884.

	Budget Estimate 1883-84.	Budget Estimate 1882-83	Regular Estimate 1882-83
Realized in the Public Works Department	200.000	153.000	153.000
Total	200.000	153.000	153.000

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Provincial Services (2) Madras.
Public Works Budget - Estimate

Government of Madras

Budget Estimate of Expenditure on Public Works from Provincial Services in Madras for the year 1883-84.

Abstract of the Estimated Expenditure for Public Works under Provincial Services in Madras for the year from 1st April 1882 to 31st March 1883.

	Reference to detailed Estimate	Budget Estimate 1883-84.	Budget Estimate 1882-83.	Regular Estimate 1882-83.
	Pages	Rs	Rs.	Rs.
Original Works.				
Civil Buildings		1069860	1096119	1115878
Communications		114630	120000	149086
Miscellaneous Public Improvements ~~including Repairs to Capital Instructional Grounds of Madras Water Supply Project~~		55400	82748	85059
		1239890	1298867	1350023
Repairs				
Civil Buildings		126000	97830	130000
Communications		37000	37053	43873
Miscellaneous Public Improvements.		3000	2500	8000
		166000	137383	181983
		1405890	1436200	1531986
Civil Buildings		151630	157053	192957
Communications		58400	65248	93659
Miscellaneous Public Improvements.		802403	799666	872583
Establishment		64207	8000	31639
Tools and Plant		27500	7300	7300
Stock and Suspense.		"	"	
Profit and Loss.				
Total		2300000	2211216	2143508

Abstract of the Charges to be incurred by the Public Works Department from Provincial Services and Contributions as detailed within

1883-84.

	Original Works Rs	Repairs Rs	Establishment Rs	Tools and Plant Rs	Stock and Suspense Rs	Total Rs	Budget Estimate 1882-83 Rs	Regular Estimate 1882-83 Rs.
Provision from Provincial Services — In India	1239890	166000	802403	57709	27500	1693415	3560054	3492346
In England.				67291	"	67291	31000	31800
Total as above.	1239890	166000	802403	125000	27500	1760706	3591052	3524146
Provision from Contributions In India	165890		1473501	60793	"	1584294	1380628	1380638
Grand Total	1405890	166000	2275904	185793	27500	3344985	4971680	4904784

Abstracts

(2)

Part II Chap I

Works

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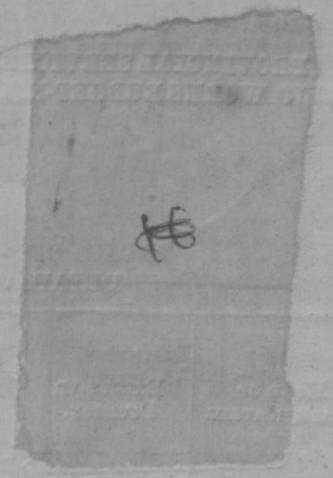
PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—CLASS B WORKS—contd.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84—*continued*.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 1881-82.	Outlay. Probable during 1882-83.	Amount applied for, 1883-84. Amount.	Amount applied for, 1883-84. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...	...	...	...	...			
				Civil Buildings—*cont.*							
Provincial Services—*cont.* Imperial—*cont.* 14, Law and Justice—*cont.*	~~Godávari Eastern.~~	~~Rajahmundry.~~	~~26~~	~~District Munsif's Court~~	~~50,000~~	...	...	~~10,000~~	...	~~26~~	~~G.O., No. 582 W., of 4th February 1878. Item No. 80, Class B Works of 1882-83 Budget.~~
	Godávari Eastern.	Peddapuram ..	27	District Munsif's Court	10,300	...	...	10,300	...	27	G.O., No. 778 W., of 25th September 1877. Item No. 31, Class B Works of 1882-83 Budget.
	Do. ...	Tuni ...	28	Sub-Magistrate's Cutcherry	7,500	...	...	5,000	...	28	G.O., No. 1214 W., of 8th May 1877. Item No. 32, Class B Works of 1882-83 Budget.
	Do. ...	Pithapuram ...	29	Do.	7,040	...	...	5,000	...	29	G.O., No. 1214 W., of 8th May 1877. Item No. 33, Class B Works of 1882-83 Budget.
	Do. ...	Rahitapuram.	30	Do.	7,400	...	...	5,000	...	30	G.O., No. 1311 of 8th May 1875. Item No. 34, Class B Works of 1882-83 Budget.
	Kurnool ...	Owk	31	Do.	14,100	...	...	8,000	...	31	G.O. No. 2254 W., of 22nd May 1878. Item No. 36, Class B Works of 1882-83 Budget.
	Do. ...	Pyapali ...	32	Do.	11,802	...	...	6,000	...	32	G.O., No. 2254 W., of 22nd May 1878. Item No. 37, Class B Works of 1882-83 Budget.
16, Jails—	Bellary ...	Allúr ...	33	Subsidiary Jail	10,770	...	...	6,000	...	33	G.O., No. 2143 W., of 13th May 1878. Item No. 46, Class B Works of 1882-83 Budget.
	Ganjam ...	Berhampore ...	34	Do.	2,730	...	...	2,730	...	34	G.O., No. 2541 W., of 8th October 1879. Item No. 47, Class B Works of 1882-83 Budget.
	Trichinopoly ...	Trichinopoly.	35	District Jail	...	...	...	20,000	...	35	Estimate awaited.
	Tinnevelly ...	Sankaranainárkoil.	36	Adding Subsidiary Jail and out-houses to the Taluk Cutcherry.	3,900	...	...	3,900	...	36	G.O., No. 1907 W., of 19th July 1879. Item No. 49, Class B Works of 1882-83 Budget.
	Trichinopoly ...	Trichinopoly.	37	Additions and alterations to the Central Jail ...	19,270	12,700	...	...	...	37	G.O., No. 166 W., of 12th January 1878. Item No. 50, Class B Works of 1882-83 Budget.
Police ...	Nilgiri ...	Manantoddy ...	38	Police Station-house	...	...	...	5,000	...	38	Estimate awaited.
	Presidency ...	Madras ...	39	Constructing Marine Police Office	...	...	...	3,500	...	39	Do.
19, Medical ...	Do. ...	Do. ...	40	General Hospital, Civil portion, water-supply to —	...	...	...	3,400	...	40	Do.
	Godávari Eastern.	Bhadráchalam.	41	Constructing a Dispensary	3,696	...	...	3,696	...	41	G.O., No. 4514 W., of 26th November 1878. Item No. 55, Class B Works of 1882-83 Budget.
	Presidency ...	Ráyapuram ...	42	Additions and improvements to the Leper Hospital.	...	...	...	17,030	...	42	G.O., No. W., of
20, Miscellaneous—	Ganjam ...	Berhampore ...	43	Executive Engineer's office with accommodation for sub-division office and stores.	...	...	...	3,000	...	43	Estimate awaited.
	Presidency ...	Ráyapuram ...	44	Prolonging tramway from the Grand Jail to the site of new Workshops at the Seven Wells.	...	...	...	...	...	44	G.O., No. 1870, of 11th July 1874, and No. 2311, of 9th August 1875. Item No. 52, Class B Works of 1882-83 Budget.
	Trichinopoly ...	Kulitalai ...	45	Additions for Sub-Registrar's Office in the Taluk Cutcherry.	5,250	...	...	2,000	...	45	Estimate awaited.
	Do. ...	Srirangam ...	46	Sub-Registrar's Office	...	...	...	2,500	...	46	Do.
				Communications.							
Metalled and Bridged Roads.	Madura ...	Madura ...	~~47~~ 47	Chattram at the head of the Gódalúr Ghát ...	4,000	...	...	4,000	...	47	G.O., No. 1410, of 12th April 1877. Item No. 55, Class B Works of 1882-83 Budget.
Miscellaneous ...	South Arcot ...	Cuddalore ...	~~48~~ 48	Constructing Registrar's office	4,200	...	...	4,200	...	48	G.O., No. 1777 W., of 13th July 1882.
				Total, Communications ...	...	...	..	...	...		



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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER

CLASS A WORKS.

PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84.

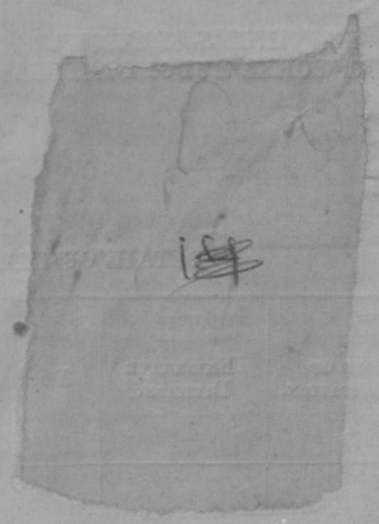
Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 1881-82.	Outlay. Probable during 1882-83.	Grant, 1883-84. Amount.	Grant, 1883-84. Total.	Item No.	Remarks and References.
					Rs.	Rs	Rs.	Rs.	Rs.		
				Civil Buildings.							
Provincial Services— Imperial— 12, Administration.	Arcot, North...	Wálajápet ...	1	Taluk Cutcherry	29,800	..	14,800	15,000	...	1	G.O., No. 1563 W., of 22nd June 1881. Item No. 2, Class A Works of 1882-83 Budget.
	Arcot, South...	Manjakuppam	2	Cutcherry for Collector of South Arcot	19,770	...	...	16,470	...	2	G.O., No. 2667 W., of 3rd October 1876. Item No. 3, Class A Works of 1882-83 Budget.
	Chingleput ...	Guindy ...	3		5,000	...	...	1,000	...	3	G.O., No. 2220, of 2nd August 1875, and No. 2153, of 17th August 1876. Items Nos. 6, 7, and 8 of 1882-83 Budget.
	Presidency ...	Mount Road...	4	Government House furniture charges				3,000	...	4	
	Nilgiri ...	Ootacamund ...	5					1,000	...	5	
	Godávari Eastern.	Kunnavaram ..	6	Constructing office and quarters for Special Assistant Agent.	9,600	...	6,000	3,600	...	6	G.O., No. 384 W., of 11th February 1882. Item No. 9, Class A Works of 1882-83 Budget.
	Godávari Western.	Pentapad ...	7	Third-class Taluk Cutcherry	7,200	...	4,000	3,200	...	7	G.O., No. 1311 of 8th May 1875. Item No. 9, Class B Works of 1882-83 Budget.
	Do. ...	Potavaram ...	8	Do. do.	7,600	212	4,188	3,200	...	8	G.O., No. 184 of 20th December 1872. Item No. 10, Class B Works of 1882-83 Budget.
	Kistna Eastern.	[illegible]	[illegible]	[illegible]	34,130	...	15,000	19,130	...	9	G.O., No. 2040, of 17th July 1875. Item No. 10, Class A Works of 1882-83 Budget.
	[illegible] ...	Mount Road...	10	Permanent quarters and [illegible] Government House.	[illegible]	...	...	[illegible]	...	10	Estimate awaited. Item No. 12, Class A Works of 1882-83 Budget.
	Salem ...	Dharmapuri ...	11	Taluk Cutcherry	27,050	..	20,000	7,050	...	11	G.O., No. 3236, of 13th November 1875. Item No. 13, Class A Works of 1882-83 Budget.
	Trichinopoly...	Perambalúr ...	12	Do.	27,000	...	10,000	17,000	...	12	G.O., No. 2769 W., of 6th July 1878. Item No. 15, Class A Works of 1882-83 Budget.
	Ganjam ...	Russellkonda.	13	Converting the terraced roof of the Tahsildar's Cutcherry into a tiled one.	3,170	...	3,170	2,330	...	13	G.O., No. 272 W., of 16th Jan. 1882. Class A Works of 1882-83 Budget. Revised estimate awaited.
	Nilgiri ...	Ootacamund ...	14	Constructing Government House Guard [illegible]	4,02,914	3,17,441	[illegible]	60,000	...	14	G.O., No. 390 W., of 11th February 1882. Item No. 18, Class A Works of 1882-83 Budget. Suppl. Est. for [illegible] awaited.
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	...	[illegible]	The estimate called for in G.O., No. 2139 W., of 10th August 1882, awaited.
	Do. ...	Do. ...	16	Additions and improvements to the Government Offices [illegible] buildings.	45,522	...	20,000	25,522	...	16	G.O., No. 2099 W., of 15th August 1882, and No. 2208 W., of 28th August 1882, also G.O., No. 3039 W., of 16th November 1882.
	Do. ...	Do. ...	17	Quarters for the married Clerks of the Government Secretariat.	21,914	...	15,000	7,000	...	17	G.O., No. 1936 W., of 1st August 1882.
	Tanjore ...	Kodavasal ...	18	Deputy Tahsildar's Cutcherry	9,410	...	4,000	5,410	...	18	G.O., No. 1981 W., of 10th August 1881. Item No. 22, Class B Works of 1882-83 Budget.
	Coimbatore ...	Mangalore ...	19	Additions to the Collector's Cutcherry ...	22,338	...	8,000	14,338	...	19	G.O., No. 71 W., of 12th January 1881. Item No. 25, Class B Works of 1882-83 Budget.
	Vizagapatam...	Párvatipur ...	20	Third-class Taluk Cutcherry	8,460	...	4,000	4,460	...	20	G.O., No. 66 W., of 12th January 1881. Item No. 24, Class B Works of 1882-83 Budget.
	Bellary ...	Harpanahalli.	21	Taluk Cutcherry	26,715	1,086	...	15,000	...	21	G.O., No. 3529 of 15th December 1874. Item No. 2, Class A Works of 1882-83 Budget.
	Do. ...	Addóni ...	22	Do.	31,680	...	..	15,000	...	22	G.O., No. 59 of 7th July 1875. Item No. 3, Class B Works of 1882-83 Budget.
	Madura ...	Kodaikanal ...	23	Deputy Tahsildar's Cutcherry		...	5,000	14,100	2,52,510	23	Estimate awaited.
	Do. ...	Tiruvadani ...	24	Sub-Magistrate's Cutcherry	10,550	...	6,550	4,000		24	G.O., No. 2915 W., of 20th November 1879. Item No. 21, Class A Works of 1882-83 Budget.
	Tanjore ...	Arantángi ...	25	Do. do.	10,300	...	5,000	5,300	...	25	G.O., No. 3010 W., of 14th November 1882. Item No. 28 Class B Works of 1882-83 Budget. G.O. No. 582 W. of 14th February 1878 Item No. 30 Class B Works of 1882-83 Budget. G.O. No. 1398 W. of 10th May 1879. Item No. 32 Class B Works of 1882-83 Budget.
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	G.O. No. 2398 W. of 14th September 18
				Carried over ...	...	...	...	27,010	2,59,625		
					1065	-	5000	6615	6,615	23A	

GOVERNMENT OF MADRAS.

PART I.—CLASS A WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84—*continued*.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 1880-81.	Outlay. Probable during 1882-83.	Grant, 1883-84. Amount.	Grant, 1883-84. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...				49,200 27,050	2,59,425		
				Civil Buildings—*cont.*							
Provincial Services—*cont.* Imperial—*cont.* 14, Law and Justice—*cont.*	Tanjore ...	Tiruvadi ...	26	District Munsif's Court	11,900	...	7,900	4,000	...	26	G.O., No. 3165 of 6th November 1875. Item No. 25, Class A Works of 1882-83 Budget.
	Trichinopoly...	Ariyalúr ...	27	Do. do.	13,800	...	10,000	3,800	...	27	G.O., No. 2121 W., of 21st August 1881. Item No. 26, Class A Works of 1882-83 Budget.
	Do. ...	Kulitalai ...	28	Do. do.	16,100	...	5,000	11,100	...	28	G.O., No. 2848 W., dated 20th October 1882.
	Kistna Western.	Bápatla ...	29	Do. do.	12,620	...	6,140	6,480	...	29	G.O., No. 1492 W., of 15th June 1882. Item No. 35, Class B Works of 1882-83 Budget.
	~~Negapatam...~~	~~Arantángi ...~~	~~30~~	~~Do. do. ... ...~~	~~10,300~~	...	~~5,000~~	~~5,300~~	...	~~60~~	~~G.O., No. 3010 W., of 14th November 1882. Item No. 38, Class B Works of 1882-83 Budget.~~
	Do. ...	Negapatam ...	31	Town Sub-Magistrate				5,000	...	31	Estimate awaited.
	Nellore ...	Kotah ...	32	Sub-Magistrate's Cutcherry	14,750	...	5,650	9,100	...	32	G.O., No. 366 of 2nd February 1877.
	Do. ...	Darsi ...	33	Improvements to the Sub-Magistrate's Cutcherry ...	9,180	...	...	6,000	...	33	G.O., No. 222 of 20th August 1874. Item No. 40, Class B Works of 1882-83 Budget.
	Coimbatore ...	Coondapoor ...	34	District Munsif's Court	9,800	...	5,000	4,800	...	34	G.O., No. 2068 W., of 8th August 1879. Item No. 42, Class B Works of 1882-83 Budget.
	Do. ...	Tellicherry ...	35	Do. do.	13,200	...	10,000	3,200	...	35	G.O., No. 1570 W., of 23rd June 1881. Item No. 43, Class B Works of 1882-83 Budget.
	Do. ...	Calicut ...	36	New Court-house	...	...	...	50,000	...	36	Estimate awaited. Item No. 27, Class A Works of 1882-83 Budget.
	Do. ...	Puthur ...	37	District Munsif's Court	14,700	...	7,000	7,700	...	37	G.O., No. 1050 W., of 23rd April 1881. Item No. 44, Class B Works of 1882-83 Budget.
	Do. ...	Kóttaparamba.	38	Sub-Magistrate's Cutcherry	15,085	...	...	15,085	...	38	G.O., No. 1021 of 26th March 1877. Item No. 45, Class B Works of 1882-83 Budget.
	Tinnevelly ...	Virudupatti ...	39	Do. do.	7,300	...	2,300	5,000	...	39	G.O., No. 3376 of 1st December 1874. Item No. 41, Class B Works of 1882-83 Budget.
Provincial— 16, Jails.	Kistna Eastern.	Masulipatam...	40	Purchase of house at Masulipatam for a residence for the District Judge.	...	...	...	~~49,500~~ 1,00,000	1,81,585	40	Estimate awaited.
	Tanjore ...	Tanjore ...	41	District Jail	2,11,100	2,500	7,500	1,00,000	...	41	G.O., No. 3059 W., dated 20th November 1882. Item No. 31, Class A Works of 1882-83 Budget.
	Tinnevelly ...	Palamcottah...	42	New Jail	2,00,800	94,558	40,000	40,000	...	42	G.O., No. 1123 W., of 3rd May 1882. Item No. 32, Class A Works of 1882-83 Budget.
	Kurnool ...	Kurnool ...	43	District Jail	...	...	...	30,000	...	43	Estimate awaited. Item No. 48, Class B Works of 1882-83 Budget.
	Madura ...	Madura ...	44	Providing accommodation for female prisoners and for a stair-case and cut-stone flooring in the District Jail.	11,303	...	9,495	1,813	17,813	44	G.O., No. 1320 W., of 29th May 1882.
17, Police ...	Bellary ...	Kampli ...	45	Constructing eight Police huts	2,500	...	...	2,500	...	45	G.O., No. 2490 W., of 25th September 1882.
	Vizagapatam...	Jeypore ...	46	Constructing a new house and office for the Assistant Superintendent of Police.	10,000	...	4,000	6,000	...	46	G.O., No. 1260 W., dated 17th May 1882.
	...	...	47	Grant for Police works costing above Rs. 1,000 and below Rs. 2,500 each.	...	...	...	*10,000	18,500	47	*A list of works on which this amount is to be spent will be submitted by the Inspector-General of Police.
				Carried over ...	...	...	...	...	6,21,393 6,19,173		



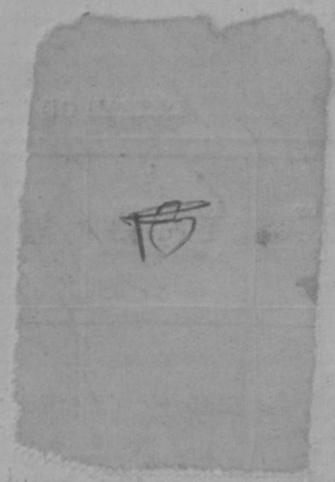
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GOVERNMENT OF MADRAS.

PART I—CLASS A WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84—*continued*.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 1881-82.	Outlay. Probable during 1882-83.	Grant, 1883-84. Amount.	Grant, 1883-84. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...	...	...	...	...	6,21,573 6,19,173		
				Civil Buildings—*cont.*							
Provincial Services—*cont.* Provincial—*cont.* 19, Medical.	Consulting Architect.	Madras ...	48	Medical School at the Monegar Choultry	22,742	10,288	5,792	6,660	...	48	G.O., No. 2651 W., of 12th October 1882. Item No. 37, Class A Works of 1882-83 Budget.
	Presidency ...	Do. ...	49	Laboratory of the Government Chemical Examiner.	~~22,000~~ ~~Nothing~~	...	5000	12000 ~~20,000~~	...	49	No sanction applied for. Estimate awaited.
	Do. ...	Chintadrepett.	50	Compound wall to the Women and Children's Hospital	6,110	...	...	6,110	...	50	G.O., N. 2291 W., of 6th September 1882.
	Do. ...	Madras ...	51	Out-patients' Dispensary and Mortuary at the General Hospital.	...	...	...	21,070	57760	51	Estimate awaited.
20, Miscellaneous.	Madura ...	Madura ...	52	Preservation of Tirumal Naick's Palace and ... a Lobby for Public Offices	1,64,723	1,52,018	40,000	30,000	...	52	G.O., No. 2386, of 23rd August 1874. " " 1587, of 5th June 1875. " " 3204, of 9th November 1875. " " 3313, of 19th November 1875. " " 1211 W., of 23rd April 1879. " " 991 W., of 21st April 1880. " " 2362 W., of 14th October 1880. " " 2639 W., of 19th November 1880. " " 944 W., of 8th April 1881. " " 2082 W., of 14th August 1882. Item No. 43, Class A Works of 1882-83 Budget.
	Arcot, South ...	Manjakuppam.	53	District Registrar's Office	4,200	...	...	4,200	...	53	G.O., No. 1777 W., of 13th July 1882.
	Bellary ...	Bellary ...	54	Do. do.	4,285	...	...	4,285	...	54	" " 2680 W., of 14th October 1882.
	Coimbatore ...	Beltangadi ...	55	Sub-Registrar's Office	2,970	...	...	2,970	...	55	" " 2292 W., of 6th September 1882.
	Do. ...	Pyoli ...	56	Do. do.	2,520	...	...	2,520	...	56	" " " " " "
	Do. ...	Collegal ...	57	Do. do.	2,630	...	...	2,630	...	57	" " 1790 W., of 14th July 1882.
	~~Do.~~ ...	~~Attibe~~ ...	~~58~~	~~Do. do.~~	~~2,000~~	...	...	~~2,000~~	...	~~58~~	" " ~~2052 W., of 1st September 1882.~~
	~~Do.~~ ...	~~Cherpatirum.~~	~~59~~	~~Do. Do.~~	~~10,000~~	...	...	~~2,000~~	...	~~59~~	" " ~~2062 W., of 12th October 1882.~~
	Do. ...	Coondapoor ...	60	Do. do.	3,160	...	2000	1160	...	60	" " 2587 W., of 4th October 1882.
	Nilgiri ...	Gúdalúr ...	61	Do. do.	4,833	...	...	4,833	...	61	" " 2292 W., of 6th September 1882.
	Trichinopoly ...	Turaiyúr ...	62	Do. do.	2,675	...	...	2,675	...	62	" " 2466 W., of 22nd September 1882.
	Do. ...	Jayankondsho-lapuram.	63	Do. do.	2,650	...	...	2,650	...	63	" " " " " "
	... ...	...	64	Reserve with Government for Registration Offices.	...	...	...	22077 14,917	...	64	
	Presidency ...	Chepauk ...	65	Alterations and Improvements to the Public Works Offices.	~~30,000~~ 10,835	...	~~20,000~~ 5,000	30,000 5,835	... 14835	65	Estimate awaited. G.O. No 130 dated 12th January 1883.
	Tanjore ...	Tanjore ...	66	Divisional Office	...	...	...	~~22,000~~ 4,777	4777	66	G.O., No. 2822 W., of 14th November 1881. Item No. 53, Class B Works of 1882-83 Budget.
	...	...	67	Grant for Minor Works and Reserve with Government.				~~22,000~~ 4,777	~~4,777~~	67	
				Public Buildings.							
				Communications.							
Metalled and Bridged Roads.	Madura ...	...	68	Completion of the road from Cumbum to the foot of the Gúdalúr Ghát.	72,148	5,701	13,180	20,000	...	68	G.O., No. 153 W., of 18th January 1882. Item No 47, Class A Works of 1882-83 Budget.
	Nilgiri ...	...	69	Road from Ootacamund to Naduvatam, 18 miles at Rs. 4,000 per mile.	...	...	...	50,000	...	69	Estimate awaited. G.O., No. 1461 W., of 6th June 1882.
	Vizagapatam.	Jeypore ...	70	New Pottingby Ghát	30,400	1,62,170	1,25,000	44,630	...	70	G.O., No. 1803 of 18th July 1876. Item No. 53, Class A Works of 1882-83 Budget. Revised Estimate awaited.
				Carried over ...	...	...	...	~~11,850~~	...		



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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

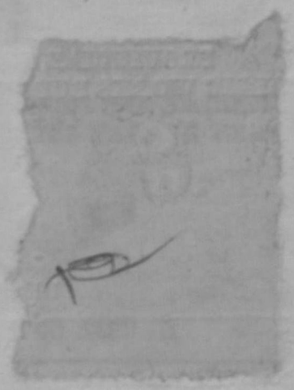
GOVERNMENT OF MADRAS.

PART I.—CLASS A WORKS—cont.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84—*cont.*

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Amount of Estimate.	Outlay. Actual to end of 1881-82.	Outlay. Probable during 1882-83.	Grant, 1883-84. Amount.	Grant, 1883-84. Total.	Item No.	Remarks and Reference.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...				114,630			
Provincial Services—*cont.* Metalled and Bridged Roads —*cont.*				COMMUNICATIONS—*cont.*							
	...	...	...	~~Alterations and Improvements to Bridge over ...~~	~~40,000~~	...	...	~~40,000~~		71	~~Estimate awaited. Item No. 49, Class A Works of 1882-83 Budget.~~
	...	...	...	~~Minor Works~~	~~12,320~~	...	...	~~12,320~~	114,630 ~~125,000~~	~~72~~	
				MISCELLANEOUS PUBLIC IMPROVEMENT.							
	Nilgiri	Nilgiri	73	Bazaar Drainage Scheme	40,000	...	...	40,000		73	Estimate awaited. G.O., No. 1637 W., of 3rd July 1882.
	Presidency	Madras	74	South Beach promenade	10,400	...	...	10,400		74	G.O., No. 1700 W., dated 6th July 1882.
	Do.	Do.	75	Alteration of the roads and replanting Chepauk grounds.	5,000	...	...	5,000		75	Estimate awaited.
	...	...	...	~~Miscellaneous ... ...~~	~~5,000~~	...	...	~~5,000~~	55,400 ~~60,000~~	76	
	...	...	...	... ...	...	...	...	...	239,630		

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT MADRAS.

PART I.—CLASS WORKS.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1883-84.

Head of Classification.	Executive Division.	Locality.	Item No.	Project and Works.	Account Estimate.	Outlay. Actual to end of 1881-82.	Outlay. Probable during 1882-83.	Amount applied for, 1883-84. Amount.	Amount applied for, 1883-84. Total.	Item No.	Remarks and References.
				Civil Buildings.	Rs.	Rs.	Rs.	Rs.	Rs.		
Provincial Services—Imperial—12, Administration.	Bellary ...	Gooty ...	1	Improvements to Sub-Collector's Cutcherry ...	2,950	...	...	...	...	1	G.O., No. 2900, of 10th October 1874. Item No. 1 of Class B Works of 1882-82 Budget.
	Do. ...	Bukkapatnam	2	Second-class Taluk Cutcherry	7,600	...	...	10,000		2	G.O., No. 29, of 3rd February 1876. Item No. 4 of 1882-83 Budget.
	Do. ...	Rayadrug ...	3	Verandah to Taluk Cutcherry	2,490	...	...	3,490		3	G.O., No. 4001 W., of 14th October 1878. Item No. 5, Class B Works of 1882-83 Budget.
	Coimbatore ...	Pollâchi ...	4	Residence for the Head Assistant Collector ...	10,580	...	...	10,580		4	G.O., No. 4761 W., of 14th December 1878. Item No. 6, Class B Works of 1882-83 Budget.
	~~Cuddapah ...~~	~~Madanapalle~~	~~5~~	~~Sub-Collector's Cutcherry~~	~~8,895~~	...	...	~~8,000~~		~~5~~	~~G.O., No. 9107-W., of 19th May 1876. Item No. 7, Class B Works of 1882-83 Budget.~~
	Do.	Pulivendla ...	6	Taluk Cutcherry	12,150	...	...	12,000		6	G.O., No. 2744 W., of 7th November 1881.
	Ganjam ...	Berhampore ...	7	Senior Assistant Collector's Cutcherry	5,340	...	...	5,340		7	G.O., No. 2541 W., of 8th October 1879. Item No. 8, Class B Works of 1882-83 Budget.
	Godâvari Eastern.	Cocanada ...	8	Additions to the Collector's Cutcherry	22,870	12,345	...	10,000		8	G.O., No. 106, of 14th July 1875, and No. 2363 W., of 1st June 1878. Item No. 11, Class B Works of 1882-83 Budget.
	Godâvari Western.	Narsâpur ...	9	Taluk Cutcherry	*	*	-	*			
	Do. ...	Tanuku ...	10	Do.	12,200	...	...	10,000		9	G.O., No. 3563, of 20th December 1875. Item No. 13, Class B Works of 1882-83 Budget.
	Do. ...	Bhimavaram...	11	Do.	10,420	...	...	10,000		10	G.O., No. 3563, of 20th December 1875. Item No. 14, Class B Works of 1882-83 Budget.
	Kistna Eastern.	Avanigadda ...	12	Deputy Tahsildar's Cutcherry	650	...	...	...		11	G.O., No. 193, of 15th April 1875. Item No. 15, Class B Works of 1882-83 Budget.
	Kurnool ...	Nandikôthkur...	13	Improving old Cutcherry and completing out-houses	520	...	...	...		12	G.O., No. 3454, of 16th August 1876. Item No. 16, Class B Works of 1882-83 Budget.
	Madura ...	Nilacotta ...	14	Deputy Tahsildar's Cutcherry	10,000	...	...	10,000		13	G.O., No. 515 W., of 1st February 1878. Item No. 17, Class B Works of 1882-83 Budget.
	Do. ...	Oothamapolliem.	15	Do. do.	11,828	...	...	11,828		14	G.O., No. 515 W., of 1st February 1878. Item No. 18, Class B Works of 1882-83 Budget.
	Do. ...	Vedasendûr ...	16	Do. do.	11,993	...	...	11,993		15	G.O., No. 515 W., of 1st February 1878. Item No. 19, Class B Works of 1882-83 Budget.
	Negapatam ...	Negapatam ...	17	Sub-Collector's Cutcherry	11,828	...	...	11,828		16	G.O., No. 1022, of 26th March 1877. Item No. 20, Class B Works of 1882-83 Budget.
	Tinnevelly ...	Shermâdevi ...	18	Head Assistant Collector's Office	5,000	...	...	5,000		17	G.O., No. 1353 W., of 12th May 1879. Item No. 23, Class B Works of 1882-83 Budget.
	Trichinopoly.	Trichinopoly.	19	Constructing a treasury room in the Collector's Cutcherry.	10,275	...	...	10,275		18	Estimate awaited.
	Tanjore ...	Mâyavaram ...	20	Deputy Collector's Cutcherry	3,760	...	...	3,760		19	G.O., No. 701 W., of 18th March 1880. Item No. 14, Class A Works of 1882-83 Budget.
13, Minor Department.	Presidency ...	Madras ...	21	Providing Lightning Conductors to the Government Central Museum.	4,500	...	...	4,500		20	G.O., No. 1946 W., of 8th August 1881. Item No. 76, Class B Works of 1882-83 Budget.
	~~Do. ...~~	~~Do. ...~~	~~22~~	~~Providing additional accommodation in the Government Central Museum.~~	2,850	...	...	2,850		21	~~G.O., No. 2378 W., of 14th September 1882.~~
14, Law and Justice.	Bellary ...	Sirugappa ...	23	Sub-Magistrate's Cutcherry	~~11,615~~	...	...	~~11,615~~		~~22~~	G.O., No. 22 W., of 6th January 1879. Item No. 27, Class B Works of 1882-83 Budget.
	Chingleput ...	Tiruvallûr ...	24	Additions to the District Munsif's Court	7,000	...	...	7,000		23	G.O., No. 2153 W., of 31st Aug. 1881. Item No. 28, Class B Works of 1882-83 Budget.
	~~Cuddapah ...~~	~~Cuddapah ...~~	~~25~~	~~Do. and alterations to the District Munsif's Court House~~	5,560	...	...	5,560		24	~~G.O., No. 1308, W., of 10th May 1879. Item No. 29, Class B Works of 1882-83 Budget.~~
				Carried over ...	~~2,780~~	...	...	~~2,780~~		~~25~~	
						...	...	...			

[ ]

Provincial Services — Madras
Public Works Budget — Estimate

Government of Madras.

Part II

Detail of the Budget — Estimate of Repairs to Public Works under Provincial Services in Madras for the year 1883-84

Head of classification	Division	Locality	Items	Estimate 1883-84. Amount	Total	Estimate 1882-83. Amount	Total
			Civil Buildings				
		Ganjam	Annual Repairs	4700		300	
		Vizagapatam	Do	1000		700	
		Godavari District	Do	800		500	
		Do - Western	Do	300		100	
		Kistna District	Do	2000		2000	
		Do - Western	Do	400		400	
		Nellore	Do	5000		5000	
		Cuddapah	Do	2000		1000	
		Kurnool	Do	1000		1000	
		West Coast	Do	-		2000	
		Coimbatore	Do	3500		1500	
		Salem	Do	4000		6000	
		North Arcot	Do	1000		1000	
		South Do	Do	1500		1500	
		Chingleput	Do	6000		4000	
		Public Offices	Do	33790		40000	
		Triplicane Poly	Do	700		700	
		Sanitary	Do	26810		24250	
		Vizagapatam	Do	948		200	
		Nellore	Do	500		500	
		Nuzvedu	Do	100		00	
		Madura	Do.	3000		2000	
		Conservancy Establishment to Govt					
			Total Civil Buildings	126000		97830	
			Communications				
		Ganjam	Annual Repairs	1600		1600	
		Vizagapatam	Do	2000		2000	
		Godavari District	Do	15000		15000	
		Presidency	Do	19488		18453	
			Total Communications	38088		37053	
			Miscellaneous Public Improvements				
		Conservancy Establishment to Govt	Annual Repairs	500		500	
			Do	2000		2000	
			Total Miscellaneous Public Improvements	2500		2500	
			Grand Total	166588		137383	

Includes Rs 20000 for Special Repairs and Rs 4206 for Annual Repairs to Temporary Police Lines also Rs 2340 for Special Repairs to Triplicane Police Lines

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART III.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT UNDER PROVINCIAL SERVICES IN THE MADRAS PRESIDENCY FOR 1883-84.

Number. 1882-83.	Number. 1883-84.	Particulars of Charges.	Salary of Office.	Estimate for 1883-84. Per Mensem.	Per Annum.	Total.	Estimate for 1882-83.	Remarks.
		EXECUTIVE BRANCH.	Rs.	Rs.	Rs.	Rs.	Rs.	
		Engineer Establishment.						
1	1	Chief Engineer, 1st Class, and Secretary to Government, and Buildings and Roads Branch.	2,500					
		Net Military pay proper of a Colonel, R.E.	304⅔	2,804				
1	1	Chief Engineer, 2nd Class, and Joint Secretary to Government, Irrigation Branch.	2,000					
		Net Military pay proper of a Colonel, R.E.	304⅔	2,304				
2	2	Total, Chief Engineers ...	...	5,108	61,296	———	61,296	
		Superintending Engineers.						
3	3	1st Class.	1,600	4,800				
2	3*	Superintending Engineer, 2nd Class.	1,350	3,375				
2	2	Superintending Engineer, 3rd Class.	1,100	2,200				
		Difference between the consolidated salary of a Superintending Engineer, 1st Class, and that of Colonel J. H. M. Shaw-Stewart, R.E., who holds the personal rank of a Chief Engineer, 3rd Class.	...	200				
		Military pay and allowances.	...	1,575				
7	8	Total, Superintending Engineers.	...	12,150	1,45,800	———	1,34,784	
		Executive Engineers.						
10	11†	Executive Engineer, 1st Grade.	950	10,450				
11	12‡	Executive Engineer, 2nd Grade.	800	9,600				
11	11	Executive Engineer, 3rd Grade.	650	7,150				
32	34	Carried over	...	27,200	2,07,096	...	1,96,080	

* Includes a Special Officer for the investigations connected with the Tank Maintenance Scheme for six months.

† Includes a Special Officer for the Tank Maintenance Scheme.

‡ Includes a Special Assistant to the Chief Engineer for Irrigation for Tank Maintenance.

Memo explaining the differences in Part III. (Establishment) of the Provincial Budget Estimate for 1883-84 to accompany Office Note No. 805 dated 20th. December 1882.

Upper Subordinate Establishment.

In accordance with the orders contained in G.O. No. 3007 W. dated 14th. November 1882, provision has been made for 5 Apprentice Supervisors, 10 Apprentice Overseers (5 Military Men, 3 of the 2nd. Grade and 2 of the 3rd. Grade) and remuneration for 2 Apprentice Instructors. Provision has also been made on account of Sub Divisional Allowance for 20 Upper Subordinates vide your Office Note No. 1414 dated 2nd. December 1882. No provision has been made under this head on account of Barrack Department works as per your Office Note above quoted.

Lower Subordinate Establishment.

Provision has been made under this head on account of Sub Overseers for the scale of Establishment approved of in your Office Note No. 626 D. dated 12th. May 1882, vide your Office Note No. 1363 D. dated 22nd. November 1882 and your Office Note quoted above.

Petty Establishment.

Provision has been made under this head on account of Maistries for the Scale of Establishment approved of in your Office Note No. 626 D. dated 12th. May 1882. The Establishment relating to Stores, Medicine and Telegraph proposed by the Superintending Engineer 3rd. Circle on account of the Kurnool Canal Division, vide his letter No. 1594 dated 9th. December 1882 received with your Office Note No. 1481 D. dated 12th. December 1882 herewith returned has been provided for without details in the Budget Estimate, Pending sanction

by Government, which should be according to the nomenclature prescribed in Code. It should be noted that this Establishment has not been entered in the statement of Establishment submitted with my Office Note No. 778 dated 17th [illegible] 1892.

*G.O. No. 1158 Mis. dated 6th May 1892.
G.O. No. 1647 Mis. dated 6th June 1892.
No. 1648 Mis. dated 6th June 1892.
No. 2120 Mis. dated 4th July 1892.

Office Establishment.

The Increases and the additional Establishments sanctioned in the orders of Government quoted in the margin, have been provided for in the Budget Estimate under this head.

Irrigation Establishment.

Provision on account of existing sanctioned permanent Conservancy Establishment has been made under this head. A lump sum provision of Rs. 13,000 has been made on account of the Office Establishment required for the preparation of Irrigation Accounts in accordance with Chief Engineer's [for Irrigation] Office Note No. 300 dated 13th December 1892 copy attached. The Conservancy Establishment proposed by the Superintending Engineer 3rd. Circle received with your Office Note No. 1493 D. dated 13th December 1892 on account of Kurnool Canal has also been provided for and requires the sanction of Government.

Temporary Establishment.

A lump sum provision of Rupees one lakh has been made under this head as per instructions contained in your Office Note No. 1414 D. dated 2nd. December 1892.

Local Allowances.

The excess under this head is due to increased provision having had to be made on account of Potinghy Chat Allowance.

[signature]
Examiner P. W. Accounts.

Note from the Chief Engineer for Irrigation to the Examiner of Public Works Accounts No. 300, dated 13th December 1892.

The list of Conservancy Establishment was sent to you on the 11th Instant.

2. The retention of the special Establishment for Irrigation Revenue Accounts after the end of the current official year, has not yet been decided on. The usual amount of Rs 13,000 may be provided in the Budget for next year in anticipation of sanction.

True Copy

[signature]

[signature]
Superintendent Correspondence Branch
PWO 20 12 92

13 DEC 82
INDIA

R. No. 735 of 83.

GOVT. OF MADRAS. } 1882. { P. W. DEPT.

SECRETARY.

Chepauk, 19th December, 1882.

OFFICE NOTE.

To C

I shall be glad to have the draft of the Estab. lishment Budget in the rough, at the Earliest possible date. The proposals under several heads require careful consideration and scrutiny.

18/12/82

To W No 805 Dy 20.12.82
Herewith together with a short explanatory memo.

C. R.C.

Writing humidly about the Estab. Charges
In 83/84 I omitted
to say that the Salary
of the Ground Surgeon
Superior Col. Chesterie
should only be provided
from 1st April to abst-
15th October 1883

Again A. Hastard
has stipulated for the
assistance of an Ens Engr
attached to his Office
I should say that
it would be well to pro-
-vide the funds as soon
as the funds of the Engineers
3d Grade + mil: Surg
as Capt. R.

No 10

The corrections in the draft Budget had been carried out before this arrived. Col Chy. the provision can be altered again on return of the Budget as regards Col. Staff Recruitment, the Executive Engineers will probably come out of the regular scale. If this officer is to be extra to the scale the prior sanction of the Govt of India will be needed

A.S.
22/12.

No 10

The draft Budget has been altered as required. Provision has been made for one additional Supdg: Engr 2d Class.
1 Executive Engr: 1st Class
1 Asstt Engr: 1st Class
with the requisite office establishments &c.
The provisions for Upper Subordinates has not been increased. And no reduction of the scale for Sub Overseers & Draftsmen has been made. It will perhaps be well communicate to above the full scale of the latter so as to make it correspond with the proposals to be submitted to the Govt of India - any savings hereafter will go to such charges for additional Upper

Subordinates - Should
these be sanctioned.
The details of Temporary
Establishments are
not req^d to be shown
in the Budget, & [illegible]
Sum under this head
is all that is necessary
In the present Budget
a provision of Rs 400,000
has been made as
against Rs 240,000 in
1882-83. The provision
can be further increased
hereafter if found
necessary.

The Credit side of
the Budget will be
prepared when all the
other Budgets are
ready. The figures cannot
be obtained till then.
Care will be taken to
enter the Council room

Signature

C. A. W.

I have not time
at this moment to
go into the details of
the Budget, but would
wish you to see that
(1) provision is made
in a Second Column in
Grade of Superintendents
2nd Class (Calcutta)
In the investigations
about minor imputed
works & Piers
(2) ditto for a full
Executive Division
called a trunk division
(3) ditto for the
3 entire divisions
with temporary Establ^s
= on the other hand
on the Revenue Side
Credit is to be taken
at 3 per cent on the

the instant Revenue
of all Muffasil &
Navigation works be
which no Capital + the
amounts are kept ~~in~~
in the total annuity
Rs 73,00,000 a/c

= Let me have the
Jeafers again by
Tomorrow morning
with the Entries as
above rectify made

22/12/82

I do not think that
more than half the
entire charge be on
Provincial Sub division
and Municipality Establish
be entitled as it is my
view that
we should be able to
Deal with to 303-84
and not to 304

B

There Office Memo may be kept with the Memorandum of the Estimate Budget Statement issued after being noted to see that the requisite formalities have been made.

S.E.
6/93

1883

C.A.W.

The requisite addition to the Financial Statement between the estimates and the modifications due to the late discussions with the Finance Minister for which many Statements and totals particularly under Detail.

I have to obtain Provisional sanction to the following Alterations and additions to the P.W.O. Main Estimate Probable Estimate Rs 60,000
Amount for 83/84 30,000

2 Municipal Hall with 2 Verandahs
Probable Estimate Rs 40,000
Amount for 83/84 Rs 20,000

3. Alteration of the Roads & Plantations in Chittoor Taluk Rs 5,000

Estimate for 1911 may and should be reduced if submitted at once, also if possible, as Government cuts towards the end of the year

For No 2 Col Barton should be asked to submit a revised estimate as possible with less local tenders and any can now be a saving & submit an estimate for 1911

For No 3 Please propose to cut-out a future as a new charge debatable Civil Lent-out & the SE of the Chenab Canals Irrigation Civil Estimate in the Office

C.A.W.

Submitted a statement of the grants applied for, and proposed, for your approval -

The grants will then stand as follows -

Capital.

Works	Rs	181,420
Establishment	Rs	43,336
Tools and Plant	Rs	2,826
Total Rupees		2,34,582

Revenue

Relinquishment & Improvement	Rs	5000
Maintenance & Repairs	Rs	77,335
Establishment	Rs	31,838
Tools and Plant	Rs	1234
Total Rupees		115,407

Total Capital & Revenue Rs 350,000

If you approve of this distribution the necessary Office Note & I will be drafted -

The reductions is as follows.

Capital	Rs	199,207
Revenue	Rs	93
Total	Rs	2,00,000

that is Rs 5,50,000 — Rs 3,500 grant required.

As the difference under Revenue is to any extent the Retrenchment of the Income may be increased, I think, with your Concurrence — and G. O. I informed accordingly —

Devan

20/1

To S. W.

The final Proof of the Provincial Budget has been struck off, after approval of the details by W. and the figures are being checked in C[illegible] Office. The accompanying draft Orders on being passed can be at once put into print, so as to be ready for issue with the Budget.

K. S.

22/1.

Cf Offic Note No 702 of 14.12.82
States that the finial
grant for Pol is Rs 2478.000
and that this amount
will not be exceeded.

Cf Offic Note No 760 of 17.12.82
Three statements of budget
and Expenditure budget
forgiven —

Cf Offic No 736 of 15.12.82
Semi complete misc Local
Statement to finance
Dept asking for
Funds for 1883-84

J. J. ... imp...
many Estab.ts has been
Rejected one lakh.
Even this will be
insufficient if the
Budget programme is
Carried out.
(i) Special sanction
will have to be obtained
for the additional
offices provided for
in connection with the
Tank investigation &
maintenance - the
regular cadre being
exceeded.?

R.S.
26/12.

C.R.W.

This may now be
sent in type

As regards (i) a pro-
vision & proposal should
should be as soon as possible
to India "in Continuation"
of the Memorandum letter on
the Subject of a Tank
Division — This should be
framed by the C in connection
with Ad Tanks.

29/12/82

C A W

Please have any ...
marginal notes seen to
and then send to the
Budget Asst after we
to Ootacamd

(a) It will be seen if Col
Chapters Hand Tanks
is provided for both
Yrs

(b) The Spl Asst to be Sub
on the Engr 2nd Grade will
have to be inserted

(c) also another Asst Engr
for the Tank division

(d) Subordinates inst as
noted also have to be
provided for the latter

(e) No need to provide
Office Establ in the
Tank Div for 83/84 as
Mr Accountant

(f) Let please sent this

PUBLIC WORKS DEPARTMENT

No.126 C, dated 13th. January 1883.

Memorandum.

From the Suptg.Engr. First Circle, H.E.No.209 G.L. dated 21st. September 1882.

Do. Do. Second " 260 G.L. dated 7th.Octr.

Do. Do. Third 1189 dated 3rd. Do.

Do. Do. Fourth 393 dated 11th. Septr.

Do. Do. Fifth 2319 dated 25th. Do.

Do. Do. Sixth 1082 T.J. 18th. Do.

From the Cong.Archt. to Govt. 435 dated 7th. Do.

Office Note from the Exmnr.P.W.Accts. 625 dated 27th.Octr. Do.

Replies having been received from Superintending Engineers to this office Circular Memo.No.1549 C dated 21st.August 1882 the following instructions are now issued for the preparation and submission of the Statement of demands on the Reserve.

The Statement should be divided into the following heads.

(1) Incomplete Major works for which grants are required, in detail.

(2) Incomplete Minor works for which funds are necessary in detail.

(3) Minor works grant for antisipated outlay during the year

(4) Repair ..... Do. ..... Do. ..... Do.

(5) Tools and Plant ..... Do. ..... Do.

(6) Establishment Temporary- in detail.

The demands under each Fund being shown separately.

2.

2. The Statement should be submitted within six weeks after the close of the official year, and to admit of this being done, Superintending Engineers should obtain by the 15th. April the Divisional Progress Reports for March containing information as to audited outlay to end of January; adjusted outlay for February; and the outlay for March as recorded in the cash and other books maintained in the Division. The total outlay for the year thus obtained would be nearly correct, and sufficiently so to fix the probable grant for the ensuing year. If the Divisional statements of demands are received in Superintending Engineers Offices by the prescribed date, there will be sufficient time for the compilation and scrutiny of the demands, before submitting the Circle Statements.

(By Order)

C.C. Lawton Captain R.E.
Ag. Dy. Chief Engineer P.W.D.

To

Superintending Engineers.
Cons. Archt. to Govt..
Exr. P.W. Accounts.
Genl. Supt. P.W. Stores.

Statement showing the Capital and Revenue Demands for the year 1

	In Sanction.					As Expected.					
	Capital	Maintenance & Repairs	Establishment & Contingencies	Total Capital & Revenue	Total Capital Demand	Capital	Maintenance & Repairs	Establishment & Contingencies	Total Capital & Revenue	Total Capital Demand
Buckingham Canal.	3,15,555	5000	18,135	3,38,690	3,15,555	2,62,220	5000	17,335	2,84,555	2,62,220
Madras Presidency:	26,220	6,220		32,440	26,220	20,720	6,220		26,940	20,720
Total	3,41,775	11,220	18,135	3,71,130	3,41,775	2,82,940	11,220	17,335	3,11,495	2,82,940

G.O. No 82 dtd 10.1.03

For London Expenses Rs 6725.03½
For Incidental expenses
under Expenses to Coming Rs 665.—

£ 379.0.12.2

To be credited in the
Statement to be rendered
under para 2 of G.O. No
605 — dtd 15. 2. 01

Items 16 to 29 inclusive
Sanction already provided

C A&O

Items in the Prog
& Budget. In 83/84

Items 1 to 13 inclusive
above all concl. if
funds held

Items 14 & 15 should be
embodied in one return
in Remark Col 'Subsistence
Estimate for improvements
awaited' under Forestable
Activity during 82/83 we
have lost only 34,572 (.)
Land Committee 30,000

64,572

Nature of these amounts
are reliable I hope comment
on any returns for Obtained
on 4th & 5th prox. to be able
to give these finally

In any case I do not
anticipate that the activity
in 83/84 will be used
to more than 60,000 instead
of 1 Lakh as provided

Items 16 to 29 inclusive
seem all correct & funds

available

Item 31 should be omitted unless there are any special circumstances

Items 32 & 35 correct

Item 36 — Mr Chisholm knows we will have the Estimate ready - send warning cover please G/ ready by 5th Jan & Print

Items 37 to 39 passed

do - 40 - Better write about - this — we should be in a position to make Sanction

Item 41 — Table is made more 9 January than he has suggested could undertake to extend in 83/84 — Better enquire about once how the SE as to the man in command which can safely be entrusted

Item 42 £40 000 - Allotment

Item 45 to 50 [illegible]

Item 51 — Entry of £ is of doubtful purpose unless specially urgent would omit

Item 52 — Mr Chisholm should at once be consulted as to entries to current and next Off. year

Items 53 to 68 may pass

do 69 — who has to furnish the Estimate? - 27/12

do 70 — Better write to SE to enquire if there is any chance of the Estimate reaching here in time for Quotation

do 71 — may be omitted we shall be enabled to provide about £ needed for Reserve

Item 73 — write to SE about - this as it should leave him about - 1/3 before Xmas

Items 74 to 76 may pass

20/12/82 Att

Very urgent

No. 138 D R. D.o 796.
22-1-83

GOVT. OF MADRAS. } 1883. { P. W. DEPT.

SECRETARY.

Chepauk, January 22, 1883.

OFFICE NOTE.

To

C

Herewith Proof the Preliminary Issue of the Provincial Services Budget Estimate for 1883. Pl. Please Check the figures. Early return of the Budget is requested.

C.R.
22/1/83 D.O.W.

R.S.
CH
24/1

No. 878 D 24.1.83
Enc 1

To W.

The figures representing past outlay agree with the Accounts. Those referring to prospective outlay are arithmetically correct. The

W. 11

udget Estimate is not
rescribed forms.

Hyth.
348/53
C.
24/1

5 S.W. C. No. 8

The Financial Dept.
regard a word Re-
gret made in Government
for 1882-84 as follows.
(1)
Ordinary Sabbi
work ——— Rs 23,00,000
(2).
Irrigation &
Navigation ——— 5,50,000

They have now
reduced this to
Rs 21,50,000
Rs 350,000 respectively.
The draft Budget
will have to be
modified accordingly.
Reductions of
the Revenue which
has stands at Rs 2,82,112
will enable the (under (1)
deficit of Rs 150,000
to be met provided
to allow the details
of establishments for works
at this stage would
cause great delay
in the issue of the

III please See any

one of the Banks

The Inspector of Rangatira begs with leave to be excused in accordance with the modified grade

It is proposed to give the charge to Sarah who passed intermediate of the original arrangement

R S
7/6/11

C.A.M.

Warrant for £10 appointing the crank Hiwi Tā ki ai the Provincial Ranger –

Passed
9/1

B Retain for the present.

R S
10-1

31

36

III please See cmy

C.A.M.

The grant of Rs 350.000 for Irrigation and transportation thereof be distributed as follows.

Works under Reports	270763
Establishment —	75.000
Tools and Plant —	4062
Total Rs	350.000

If you approve, the same may be credited through the budget proof.

I put up a draft for your Approval.

Issue
24/1

VII please See any

To W

The "Works" and "Establishments" portion of the Provincial Budgets are sent in type. and the other portion in MS. Final orders for dispatch are requested.

The Budget is due in Calcutta on the 15th Inst. but the Govt of India do not require details of Provincial Works and an abstract can be telegraphed on Monday.

R. J.
13/V.

360

III please see my

C. A. W.

Lo some on the
like about. Can
Entertain for a d. or
Visit to Come over
here second week
Can circulate please
return at once to
me

I Trust London affair
of probable nothing in
Detail. Sorry as I do
much more to thank
me under that but
I think we should have
to attend annual
Com Meeting after
Prov. Budget. In 83/84
as it will be Impossible

to bring in a Bill
and favorably consider
those in favour for
Budget

"Inter alia" [illegible]
to be an [illegible] Bill
Confederation Council the
subject which Establish
to provide for the
Territory Subdivision
of Athabasca and
as to Divide both Le
Legislative Assembly
Subdivision Alberta
but future as circumstances
for Legislative Assembly
Alberta can be fairly
also not included in
Provincial Scale -

Abbott

5/11/93.

C.A.W.

From a Copy of this
Schedule, in the Schedule
as it now is, he demands
for the Press - to be found
in Copy, and a proof
obtained. The only point
Provincial Budget is
this Schedule, and it
will be seen that
not a proof only.

III

C. A.W.

As an enquiry to our telegram to Calcutta I return the proofs at once

Regarding Part-I we only alteration I suppose making is to substitute words No 25 B, Additions and alterations to the Electric Supply Cost House Cuddalore in the Sub-Centers estimate at Madanapalle in Class A

2 You should also soon be able to send Sanction to the Estimate Rs 54,000 in the Alteration & Rectifn to the P.W. Main work No 65 Class A

3 As regards part III please see my

No. 349 G.L.

From,

The Offg Supt Engineer
1st Circle

To,

The Chief Engineer
P.W. Department

Dowlaishweram 19th Oct 1883
Despt 20th-do—

Sir,

I have the honor to submit herewith the following Budget Lists for 1883-84-

1 Imperial Military-
1 —Do— Other Services
1 Provincial—
1 Other Incorporated Local
1 Excluded Local—
5

I have the honor to be,
Sir,
your most obedt Servt

Offg Supt Engr 1st Circle.

Unexpired entry in pencil, and make such undefaced as may be needed

With the above the Budget may be considered as finally disposed

14.1.83

I am not quite certain whether we have claimed all we could under Contributions Part-III e.g. 3 per cent on the total receipts on Navr & Irr. Rects except Rebates — or again 3 per cent on the total revenue whether under the Delta Dotn works Productive

Detail of the Budget estimate for Services in the 1st Circle for the year Original works under Provincial 1883-84.

Head of Classification	Executive Division	Locality	Item No.	Project and Work	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83	Grant required in 1883-84 Amount	Grant required in 1883-84 Total	Item No.	Remarks and References
				P. Ordinary Original Works Civil Buildings.							
Provincial Services Imperial 12 Administration	Ganjam	Berhampore	1	Senior Assistant Collector Cutchery.	5,340	-	-	5,340	A	1	G.O No. 2541 W. of 8/10/79. The estimate is now undergoing revision, & the amount of the revised estimate will probably be in excess of the present one by Rs. 2330.
		Russelconda	2	Converting the terraced roof of Tahsildar's cutchery into tiled one	3,170	-	-	3170	A 2330	2	G.O No. 272 W. of 16-1-78.
	Vizagapatam	Parvatipur	3	3rd Class Taluq Cutchery	8460	-	4000	4460	A	3	Do. No. 66 W. of 12-1-81
	Godavari Eastern Division	Cocanada	4	Additions to the Collector's Cutchery	31870	12,846	-	10,000	B	4	Do. No. 106 of 14-7-75 & No. 236 SW of 1/6/78.
		Bhadrachellam	5	Tahsildar's Cutchery and out houses.	7500	-	5,000	2,500		5	Do. No. 1642 W. of 28/6/82
		Kumaravaram	6	Constructing Office and Quarters for Special Agent	9600	-	6,000	3600	A	6	Do. No. 384 W. of 11/2/82
								28,230			

Detail of the Budget estimate for Services in the 1st Circle for the year Original works under Provincial 1883-84.

Head of Class Execution Section	Locality	Item No.	Project and Works	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83.	Grant required in 1883-84 Amount	Total.	Item No.	Remarks and Reference
								28230		
	Western Putapad Do	7	Third class Taluq Cutcherry	7200	-	4000	A 3200	X	7	G.O No 1311 of 8/5/75
	Pithapuram	8	Do	7600	212	4188	A 3200	X	8	Do 184 of 20/12/72
	Tanuku	9	First class	21420	-	-	B 10000	X	9	Do 3563 of 20/12/75
	Narsapur	10	Do	22900	-	-	B 10000	X	10	Do
	Rhimavaram	11	Do	22650	-	-	B	X	11	Do
(14) Law & Justice Eastern Do	Rajahmundry	12	District Munsiffs Court				B 10000	X	12	Do 582 W of 4/2/78
	Peddapuram	13	Do	10300	-	-	B 10300	X	13	Do 778 W of 25/9/77.
	Tuni	14	Sub-Magistrate's Cutcherry	7500	-	-	B 5000	X	14	Do 1214 W of 8/5/77
	Pithapuram	15	Do	7040	-	-	B 5000	X	15	Do 1214 W of 8/5/77
(16) Jails	Rahitapuram	16	Do	7400	-	-	B 5000	X	16	Do 1311 of 8/5/75
	Ganjam Berhampore	17	Subsidiary Jail with out-lines	2730	-	-	B 2730	X	17	Do 2541 W of 8/10/79
	Viragu Vizagapatam	18	Constructing a Warder's line, Deputy Jailor & Head Constable's Quarters in the Lillah Jail.	4050	-	-	4050		18	Plans and estimates have been submitted with this Office letter No 280 V.I. of 6th July 1882 to the Inspector General of Jails for countersignature and transmission to Govt for sanction.
							Saved in G.O No 2454 W of 21/9 for 8 Jamedars			
(17) Police	Vizagpt Seypore	19	Constructing a New House for the Assistant Superintendent of Police	10000	-	4000	6000		19	G.O No 1260 W of 17/5/82
							102710			

Detail of the Budget estimate for Services in the 1st Circle for the year Original works under Provincial 1883-84.

Head of Service	Locality	Item No.	Project and Work	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83	Grant required in 1883-84 Amount	Item No.	Remarks and Reference
							102710		
(19) Medical	Chandernagore	20	Constructing a Dispensary	3696	-	-	3696	20	G.O No 4514 W. of 26-11-78.
(20) Miscellaneous	Conjeeveram	21	Tax Sub Office with accommodation for Sub Registrar and Store	-	-	-	3,000	21	Plans & estimates are under preparation in the D.E. Office & will be submitted for sanction shortly.
Judicial	Cuddalore	22	Registrar's Office	4700			4700	22	The estimate returned by the Chief Engineer for some information will be retransmitted for sanction shortly.
Do	Chingleput	23	Sub Registrar's Office	2650			2,650	23	Estimate has been sent with this Office letter No. 1357 G.D. of 9/9/82 to the District Registrar for submission to the Inspector General of Registration for countersignature &c.
							Total Civil Buildings. 116756		
Detailed Estimates for Bridges & Roads	Chingleput	24	Communication Original Works. Between Tatingly & Chat	130400	162170	75000	94630 *	24	A revised estimate amounting to Rs 331800 has been submitted to the Chief Engineer with this Office No. 396 T.L. dated 4th September 1882.
							Total Communication 94630		

* If the additional sum of Rs 80,000 applied for for 1882-83 (vide this Office No. 1257 of 18-9-82) be allotted the required grant for 1883-84 would be Rs 446200.

Detail of the Budget estimate for Services in the 1st Circle for the year Original works under Provincial 1883-84.

Head of Class Section	Executive Engineer	Locality	Item No.	Project and Work	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83	Grant required in 1883-84 Amount	Grant required in 1883-84 Total.	Item No.	Remarks and Reference
Provincial Ordinary Min. Pub. Improvements											
				Nil.							

Statement shewing the amounts of the estimated requirements in lump sums for the year 1883-84 under various heads for each Division in the 1st Circle prepared vide G.O No 405 W. of 16-2-81.

Divisions.	Minor Works.			Repairs			Tools & Plant	Remarks.
	Civil Buildings	Communication	Misc. Pub. Improvts	Civil Buildings	Communication	Misc. Pub. Improvts		
Ganjam	6,000	-	-	4700	1600	-	500	The amounts under Civil Buildings & Minor Works include
Vizagapatam	10,000	-	-	1000	2000		1000	provision for Sub-Registrars' Offices which are likely to
Godavari Eastern Dn	13,000	-	-	600	15,000		8,235	be constructed next year & the estimated cost of which
—Do— Western Do	11,000	-	-	800	-	-	1200	is not over Rs 2,000 each.
A. Project Division	-	600	-	-	-	-	600	* For maintenance of Chilka Lake Canal.
								* For —Do— of Pachipenta & Turnier Ghat Roads
Total	40,000	600	-	6,500	18,600	-	11,535	* For —Do— of Dumagudem works.

Supg Engr's office 1st Circle
Boundaikhunta
19th October 1882.

C. Ewart
Offg Supt Engr 1st Circle.

comd'g Engr
Offg

To W

Statement shewing how the charge for 1883/84 entered in the "Statement of probable receipts and charge under S.W. Provincial" are arrived at.

Original Work as detailed in accompanying Statement.

Civil Buildings . . .	8,70,000
Communications . . .	1,37,000
Mjs: Public Impts	55,400
	10,62,400
Repairs	1,60,000
Tools & Plant - probable . . .	50,000
Establishment (probable) . . .	8,00,000
Total Rs	20,72,400
Add for unforseen Outlay Rupees . . .	2,27,600
Total Rupees	23,00,000.

The grant for Irrigation and Navigation is taken from the Budget sent in by the Ex. Fifth Circle (put up)

Buckingham Canal

as per Budget .. Rs 3,89,190

Provision for

Establishment " 59,514

Tools & Plant ... " 5,838

Rs 4,54,542

Add reserve " 15,458

Total Rs 5,00,000

Water Supply

as per Budget . Rs 35,400

Establishment " 8,142

Tools & Plant " 531

Rs 44,073

Add reserve " 5,927

Total Rupees 50,000

It is proposed to ask the Financial Dept for Rs 2,300,000 under "Provincial Ordinary" and Rs 5,80,000 under "Irrigation & Navigation Protected" The details of the Rs 23,00,000 are given in the accompanying J

Budget Lists - These however being open to such revision as you may consider necessary.

K.S.

24-11.

No. 126. C. 13. 1. B

Co. 909. H. 12. 4. R
" 1965. H. 2. 8. R
" 2744. H. 7 11 H
" 1190. H. 10. 5. R
" 886. H. 3. 4. 82
" 2587. H. 4. 10. R
" 2208. H. 28. 8. R
" 2099. H. 15. 8. R
" 1936. H. 1. 8. R
" 1790. H. 4. 7. R
" 2292. H. 6. 9. R
" 2139. H. 17. 8. R
" 2299. H. 7. 9. R
" 1416. H. 6. 6. R
" 1667. H. 3. 7. R
" 2294. H. 6. 9. R
" 2273. H. 4. 9. R
" 2378. H. 14. 9. R
" 1123. H. 3. 6. 82
" 1981. H. 10. 8. R
" 2466. H. 22. 9. R
" 2915. H. 20. 11. 79
" 1320. H. 29. 5. R
No. 1898. C. 24. 10. R
Co. 2764. H. 24. 10. R
No. 1398. C. 29. 11. R
Co. 2690. S. 10. 76
No. 2091. C. 16. 11. R
No. 2401. C. 22. 12. 82
" 2403. C. 22. 12. R
Co. 1408. H. 6. 6. R
" 256. H. 1. 2. R
287
~~" 1667. H. 3. 7. R~~
" 3224. H. 15. 12. R

From
The Supg Engineer
1st Circle

To The Chief Engineer
P. W. D.
Madras

Dated 19th
Desp. 20th } October 1882
Rec'd

No. 3149 G.L.
Enclosures 5

Budget Lists for
1883-84 - Submits
certain -

No. 2486. L.

Superintending Engineer's Office
2nd Circle, Masulipatam
29th September 1882

From
The Superintending Engineer,
2nd Circle.

To
The Chief Engineer,
Public Works Department

Sir,

I have the honor to forward herewith, Budget Estimate for 1883/84 of Provincial Services, and to state that, no works under Imperial are proposed for execution in the next Official year. Consequently, no Budget Estimates under that Head is submitted.

2. In the Provincial Budget, only Major works proposed for execution during the next year are included. The requirement for Minor works, Repairs, and Tools and Plant will be reported before the Close of March next as ordered in Code Para 1187 as modified by Standing Order

No. 151 of 1881. Please also see 3rd Return
in page 12 of Appendix C.

I have the honor to be,

Sir,

Your most Obt. Servant

J. W. Rundall

Superintending Engineer

2nd Circle.

Provincial Services

Public works Budget Estimates.

Detail of the Budget Estimate for Original works under Provincial

2nd Circle

Madras

Part I — Class A works.

Services in the 2nd Circle for the year 1883-84.

Head of Classification	Executive Divisions	Locality &c.	Class	Project and Works	Amount of Estimate	Outlay 1882-83 Rs	Grant 1883-84 Rs	Total Rs	Remarks and References.
Provincial Services.				Provincial Ordinary Civil Buildings Original works.					
Imperial. 12. Administration. Justice Custom. Municipalities &c.				Improvements to the Collector's Cutchery	34,130	-	15,000	19,130	1 G.O. No 2040 of 17th July 1875. Class A works of 1882-83, Budget
— do —				Repairs to Sub Magistrate's Cutchery	14,700	-	6,000	8,000	33,130 2 G.O. No 1222 of 20th August 1874. Class B works of 1882-83, Budget
14. Law and Justice	Nellore	Gudur	41	District Monsiff's Court	12,620	-	9,000	3,620	3,620 3 G.O. No 1496 W. of 15th June 1881. Class B works of 1882-83, Budget
								Total Civil Buildings	36,750

Superintending Engineer's Office;
2nd Circle, Masulipatam
22nd September 1882.

Compared

S. W. Russell
Superintending Engineer,
2nd Circle

Enclosure to No. 248 G.L. of the 22nd
September 1882 to the Chief Engineer
P.W. Department.

240

262

Provincial Services Budget
Estimate for 1883-84.

From

The Superintending
Engineer 2nd Circle

To

The Chief Engineer
& P.W.D. Madras.

Dated 22nd
Recd 23rd } Sept. 1882

No. 2108 G.L.

Enclosure one

Provincial Service
Budget Estimate
for 1883/84 ——
Forwards with
Remarks ——

3rd Circle

Provincial Services

Public Works Budget

Estimate 1883-84.

Abstract.

	Estimate 1882-83 Amount Total	Estimate 1883-84 Amount Total
Civil Buildings.		
Original Works	142760	44641
Repairs	6000	4000
	142760	44641
Tools and Plant	3500	3000
	3500	3000
Grand Total	152260	47641

Provincial Services — Part I — 3rd Circle

Public Works Budget Estimate

Details of the Budget Estimate for Original Works under Provincial Services for the year 1883-84

Head of Classification	Executive Division	Locality	Item No.	Projects and Works	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83	Grant 1883-84 Amount	Total	Remarks & References
				Provincial Ordinary						
				Civil Building						
				Original Works						
Provincial Services Superintendence — Establishment	Ballary	Harpanhelli	1 /	Salary Establishment	—	21715	486	-	15,000	G.O. No. 3529 of 15th Dec 1764 No. 1190 of 10th May 82 — Item No. 2 Class B Works of 1882-83 Budget.
	Administration		2 /	Do	—	31650	-	-	15,000	G.O. No. 57 of 7th July 78 No. 1190 of 10th May 82 — Item No. 3 of do
	Bankapalam		3 /	Second Class Salary Establishment	—	17600	-	-	12000	G.O. No. 29 of 3rd July 78 Item No. of do
	Royadurg		4 /	Verandah to Salary Establishment	—	3490	-	-	3490	G.O. No. 4008 W of 12th Oct 78 Item No. of do
	Candiapah Madanapalli		5 /	Sub Collectors Establishment	—	14375	-	-	2000	G.O. No. 4237 W of 12th May 79 Item No. 7 of do
	Palicondla		6 /	Salary Establishment with out houses	—	22150	-	-	12000	G.O. No. 2722 W of 7th Nov 1881
	Kurnool Nandikotkur		7 /	Improving Old Establishment & completing out houses	—	18000	-	-	12000	G.O. No. 3082 of 15th Aug 78, Item No. 18 class B Works of 1882-83 Budget
14 Law & Justice	Bellary	Sirugupah	8 /	Sub Magistrates Establishment	—	12600	-	-	7000	G.O. No. 2280 of 6th June 79 Item No. 27 of do
	Candiapah	Candiapah	9 /	Additions & Alterations to the District Court houses	—	7700	-	-	7700	G.O. No. 1190 W of 10th May 79 Item No. 39 of do
									98370	

Head of Classifications	Executive Division	Locality	Item No.	Projects and Works	Amount of Estimate	Outlay Actual to end of 1881-82	Outlay Probable during 1882-83	Grant 1883-84 Amount	Grant 1883-84 Total	Remarks & References
									28270	
Provincial Services Imperial 14 Law & Justice	Kurnool	Cumb.	10	Sub. Magistrate's Cutcherry	4400	-	-	2000		G.O. No. 2254 W. of 22nd May 78. Item No. 36 Sess. B. Works of 1882-83. Budget
		Pyapalle	11	do do	11800	-	-	1000		G.O. No. 2254 W. of 22nd May 78. Item No. 37 of do
Provincial 16. Jails	Bellary	Allur	12	Subsidiary Jail	10770	-	-	6000		G.O. No. 2254 W. of 22nd May 78. Item No. 38 of do
	Kurnool	Kurnool	13	New District Jail at Kurnool		-	-	32000		Estimate will be submitted
										Item No. 40 of do
									13270	
17 Police	Bellary	Kumply	8	Police Huts	2570	-	-	2570		Included at the request of the Superintendent of Police, Bellary
	Cuddapah	Bolapanur		Police Station House	1700	-	-	1700		G.O. No. 2254 W. of 22nd May 78.
									4270	
				Total Comb Buildings					42740	

Provincial Services 3rd Circle

Public Works Budget Estimate Part I

Detail of the Budget Estimate of Repairs to Public Works under Provincial Services for the year 1893–94.

Sheet of classification	Division District Items	Estimate 1892–93 Amount	Total Amount	Estimate 1893–94 Amount	Total
	Coal Railway				
Provincial Services	Ballarat Ballarat Annual Repairs	300		100	
	Castlefort Castlefort do	200		200	
	Kurnool Kurnool do	100		100	
	Total Coal Railways	600		400	

Provincial Services 3rd Circle

Public Works Budget Estimate

Part II

Detail of the Budget Estimate for Tools & Plant under Provincial Services for the year 1893–94.

Divisions	District	Items	Estimate 1892–93 Amount	Total	Estimate 1893–94 Amount	Total
		Tools and Plant				
Ballarat	Ballarat	do	150		100	
Castlefort	Castlefort	do	100		100	
Kurnool	Kurnool	do	100		100	
		Total Tools & Plant	350		300	

Supply Engrs Office, 3rd Circle
Ballarat 4th September 1893

Major R.E.
Superintending Engineer
3rd Circle

From,

The Superintending Engineer
III Circle

To,

The Chief Engineer
P. W. Department
Madras

Dated 5th October 1882
Received

Provincial :—
Budget Estimate for
1883—84.

No 410

Provincial Services

Public Works Budget Estimate

Fourth Circle

Public Works Department

Provincial Service Budget Estimate
of the
Public Works Department
for the Year
1883-84.

per Engineer's Office
Coimbatore
5th September 1882

Lieut Col R E
Superintending Engineer
IV Circle

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Details of Budget Estimate under Expenditure	
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" II " " " Repairs	14
" IV " " " Tools and Plant	15
Appendix to above	
Appendix A Distribution of the Grant by Departments	16

Provincial Services — IV Circle.

Public Works Budget Estimate 1883-84

Budget Estimate of expenditure on Public Works from Provincial Services for the year 1883-84.

Abstract of the Estimated expenditure for Public Works under Provincial Services for the year from 1st April 1883 to 31st March 1884.

	Reference to detailed estimate	Budget Estimate 1883-84.	Budget Estimate 1882-83.	Regular Estimate 1882-83
Original Works				
Civil Buildings	2-9	3,29,268	2,96,773	2,55,103
Communications	10 & 11	50,000	-	11
Miscellaneous Public Imps.	12 & 13	40,000	-	85,000
	-	4,19,268	2,96,773	3,40,114
Repairs				
Civil Buildings	14	13,500	15,500	14,500
Communications	14		"	"
Mis: Public Improvements	"	"	"	"
			15,500	14,500
Total Works and Repairs.				
Civil Buildings	-	3,42,768	3,12,273	2,69,603
Communications	-		"	11
Mis: Public Improvements	-	40,000	"	85,000
			3,12,273	3,54,614
Establishment	-			
Tools and Plant	15	4317	6310	3,400
Grand Total	-		××× 3,03,963	××× 3,58,014

××× Exclusive of the provision for Establishment.

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original works un-

der Provincial Services for the year 1883-84.

Head of Classification	Executive Division	Locality	No.	Project and Works	Amount of Estimate	Outlay actual Total of 1881-82	Outlay Probable during 1882-83	Grant 1883-84 Amount	Grant 1883-84 Total	No.	Remarks and References.
				Provincial Ordinary							
				Civil Buildings							
				Original Works							
Provincial Services Imperial	Northern Kootenay		1	Sundry Outlay	29,500	-	14,500	15,000	√	1	G.O. Nº 1563 dated 26th June/81 Item 2 of Budget 1882/83 Class A.
Do	Do		2	Do	27,050	-	20,000	7,050	√	2	Do Nº 3236 of 15th Nov/75 Dº 13th
Do	Do		3	Government House Furniture Charges	.	.	.	1,000	√	3	Item Nº 8 of Budget 1882/83 Class A.
Do	Do		4	Constructing Govt House Keppel Harbour	402,914	347,641	34,572	20,000	√ A	4	G.O. Nº 3702 of 11th Febry/82 Item Nº 10 of Budget 1882/83 Class A.
Do	Do		5	Improvements to Govt House	153,000	"	"	80,000	√ A	5	G.O. Nº 2139 of 19th Aug 1882.
Do	Do		6	Alterations and Improvements to Stone House	44,962	"	20,000	24962	√ A	6	G.O. Nº 2077 of 15th Aug/82 Nº 2206 of 22th August 1882
Do	Do		7	Quarters for 3 Married Officers of the Regiment	21,914	.	15,000	7,000	√ A	7	G.O. Nº 1936 of 1st Aug 1882.
Northern Kootenay and Civil Buildings			8	Civil Imperial Buildings Carried Over	15,035	.	.	15,035	√	8	G.O. Nº 1011/24-7-71 Item Nº 47 Class B of 1871 Civil G.O. Nº 2299 of 5th Sept/82
					.	.	.	17,0097			

(2)

(3)

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original Works under Provincial Services for the Year 1883-84.

Head of Classification	Counties Districts Localities	Repairs and Works	Amount of estimate	Outlay actual Funds 1881-82	Outlay Probable during 1882-83	Grant 1883-84 Amount Total		Remarks Round/reference
		Brought forward				170097		
		Provincial Ordinary (Co)						
		Court Buildings (Cont)						
		Original Works (Cont)						
Provincial Services (continued) Imperial (Cont)	Counties Public	9 Residence for Water Bailiff						
12 Administration (Cont)	Counties Irrigation	10 Additions to the Collectors Quarters						
14 Law and Justice	Do	11 New Court House						
	Do	12 District Surveyors Court						
	Do	Gaols 13 Do Do						
	Do	Police 14 Do Do						
		Provincial Ordinary						

					B			G.O.R. 14-12-77 Item 2 Class B of 1882/83.
			10,580		10,580	√	9	
					A			G.O. No 91 of 12th January/81 Item No 25 Class B Budget 1882-83
			22,333	8,000	14,333	195015	10	
					5,000		11	Estimate will be submitted shortly Item No 37 of Budget 1882/83 Class A.
								G.O. No 2068 of 8th Aug 1877
			9,800		9,800	√	12	Item No 42 Class B of 1882-83 Budget. Vide also G.O. No 2299 dr of 7th September 1882
					A			
			13,200		13,200	√	13	G.O. No 1570 of 25th June 1881 Item No 43 Class B of 1882-83 vide also G.O. No 2299 dr of 7 September 1882.
			14,700		14,700	√	14	G.O. No 1000 dr of 23rd April/81 Item No 44 Class B of Budget 1882-83 vide also G.O. No 2299 dr of 7th September 1882.
						87700		
						282715		

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original Works under Provincial Services for the Year 1883-84.

Head of Classification	Executive Division	Locality	No.	Repairs and Works.	Amount of Estimate	Outlay actual Expenditure 1881-82	Outlay Probable during 1882-83	Grant 1883-84 amount	Total	No.	Remarks & References
				Brought forward	-	-	-	-	282715		
				Provincial Ordinary Cr.							
				Civil Buildings (Contd)							
				Original Works (Contd)							
14 Law and Justice (Contd)		Coimbatore	13	Sub Magistrates Cutchery	15,085	-	-	15,085		18	G.O. No 1021 21-3-77 Item No 47 clause B of 1882/83 and G.O. No 2297 Ms of 7th September 1882.
	Do	Pollachi	14	Residence for Asst. & Collector	10580	-	-	10580	113365	14	G.O. No 47614 14-12-81 Do 3 Do Do
17 Police		Nilgiri Commissy	15	Police Station House	Estimate			5,000	5,000	15	Estimate under preparation
20 Miscellaneous		Nilgiri Coonoor	16	Sub Registrars Office	4,333	-	-	4,333		16	G.O. No 2292 Ms of 6th September 1882
		Coimbatore Nattamgudi	17	Do Do	2,970	-	-	2,970		17	Do Do Do
	Do	Erode	18	Do Do	2,520	-	-	2,520		18	Do Do Do
				Carried Over				10323	287715		

(6)

(7)

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original Works under Provincial Services for the Year 1883-84

Head of Classification	Executive Division	Locality	No.	Progressive Works	Amount of Estimate	Outlay actual Expenditure 1881-82	Outlay Probable amount during 1882-83	Grant 1883-84. amount	Total	No.	Remarks & References.
				Brought forward				10323	287715		
				Provincial Ordinary (Cont)							
				Civil Buildings (Cont)							
				Original Works (Cont)							
20.	Miscellaneous (cont)	Coimbatore	Collegial	19 Sub Registrar Office	2,630			2,630		19	G.O. No 1790 dt. of 14th July 1882
—	Do	Madras	20	Do	2,600			2,600	15553	20	G.O. No 2252 dt of 1st Sept/82
21				Grant for minor works the estimated cost of which does not exceed Rs 2500 each				26,000	26,000		
				Total Civil Buildings					329268		

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original Works under Provincial Services for the Year 1883-84.

Head of classification	Locality	Division	No.	Proposed Works	Amount of Estimate	Outlay actual Budget 1881-82	Outlay Probable during 1882-83	Grant 1883-84 Amount Total	No.	Remarks & References
				Provincial Ordinary Expenditure						
				Communications						
				Original Works						
Metalled or Bridged Roads	Belgaum		22	Road from Ostwar mund to Nipani 18 miles 4000 Rs per mile	72,000	.	.	50,000	50,000	22 G.O. No 1416 dated 7th June 1882
				Total Communications				50,000	50,000	

Miscellaneous Public Improvements

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Original Works under Provincial Services for the Year 1883-84.

Head of Service Classification Division	Locality	No.	Proposed Works	Amount of Estimate	Outlay actual to end of 1881-82	Outlay probable during 1882-83	Grant 1883-84 Amount	Total	No.	Remarks & References
			Provincial Ordinary (Contd)							
			Miscellaneous Public Improvements							
			Original Works							
(b) Drainage, including Drainage	Nilgiris	Ootacamund	23 Kuguna Drainage Scheme	90,000		50,000	40,000	40,000	23	G.O. No. 1667 dated 3rd July 1882
Total Miscellaneous Public Improvements						50,000	40,000	40,000		

Provincial Services — IV Circle

Public Works Budget Estimate

Detail of the Budget estimate of Repairs to Public works under Provincial Services for the Year 1883-84.

Head of classification	Division	Locality	Items	Estimate 1883-84 Rs	Estimate 1882-83 Rs
29. Miscellaneous	Coimbatore		**Civil Buildings**		
	North West		Annual Repairs	3,500	3,500
	Salem		Do	1000	1000
	Nilgiris		Do	4000	4000
			Do	5000	4000
				13500	14500
	Nilgiris		**Communications**		
			Road from Kallar to Coonoor without Dak permission		
			Do Coonoor to Ootacamund with at Rs per mile		
			Do Ootacamund to Kotagherry with at Rs per mile		
			Kotagherry Circle		
			Kotagherry to Coonoor		
			Etc Communications		

(14)

Provincial Services — Part IV — IV Circle

Public Works Budget Estimate

Detail of the Budget Estimate for Roads & Communications under Provincial Services for the Year 1883-84.

Division	Communications Estimate	Miscellaneous Estimate	Roads	Road Communication	Ferry Establishment	Canal Repairs	Bridges	Establishment	Repairs & Contingencies	Estimate 1883-84	Estimate 1882-83
Coimbatore										500	500	1,000
North West	121		527							200	848	300
Salem	45		200		10					300	555	600
Nilgiris	400		100							400	2,000	1500
Total Rs	566		1927		10					1400	3903	3,400

Abstract of the foregoing provision for Roads & Communications

Total of the details shown above — Rs — 3,903

Total of the details shown above

Distribution of the above

Contribution from Imperial Military Works — 3,247

at 1/6 per cent on the grant for works — 163

do do for Establishments

do do from Irrigation & Navigation and Agricultural Ordinary — 5,310 — 8,720

Balance from Provincial Funds

(15)

Provincial Services

IV Circle

Public Works Budget Estimate

Appendix A

Distribution of the grants for 1883-84 under Provincial Services arranged by Departments and objects of work

	Imperial original Estimate	Imperial Supplementary Estimate	Total	Total Additional Estimate required	Total Grant 1883-84	Estimate for 1882-83
Civil Buildings						
Provincial Services						
Imperial						
Administration	17,415	.	17,415			
Minor Departments	.	.	.			
Law and Justice	2,700	.	2,700			
Ecclesiastical						
Provincial						
Jails						
Police						
Educational	5,000	.	5,000			
Medical	.	.	.			
Miscellaneous	15,553	.	15,553			
Minor Works	.	2,600	2,600			
Total Civil Buildings	39,268	2,600	42,268			
Communications						
Metalled & bridged Roads	60,00	.				
Miscellaneous Public Improvements						
Sewage works, Drainage	40,000	.	40,000			
Total Provincial	39,268	2,600			29,423	

277

277

8 L 8

From

Superintending Engineer

4th Circle

Dated 28th September 1883

Received 3

No. 410

Quarters

Provincial Budget

Estimate in the 4th

Circle for the Year

1883-84

KCD

Head Quarters Engineer's Office 4th Circle,

Camp Coty 20th October 1883.

No. 4145

From,

The Superintending Engineer,

Fourth Circle.

To,

The Chief Engineer,

Public Works Department.

Sir,

At the instance of the Rev Authorities, I have the honor to request you will be so good as to add Rs 2000 for constructing 2 Police Huts in the North Arcot District, as shown in the margin, to the provision of Rs. 26,000 made in the Provincial Budget of this Circle for 1883-84, under Minor Original Works.

a. Police Huts at Vaniyambadi Rs 1200

b. Do at Tirupattur Rs 800

Rs 2000

I have the honor to be,

Sir,

Your most Obedt servant

R Keatly Fuller

Supdg Engineer, 4th Circle

1

From

The Supg. Engineer

4th Circle.

Dated 2nd

October 82

No. 445.

Encls.

Provincial Budget
for 1883/84 -
Requesting to add
Rs. 2880 to the provision
made for minor
original works

B/

98

Memorandum to accompanying the Provincial Budget of the 4th Circle for 1883/84.

It is believed that the following roads on the Nilgiri Hills have to be maintained by the P. W. Department in the next and the subsequent years.

(1) Road from Kullar to Coonoor

(2) ——— do ——— Coonoor to Dotacamund

(3) ——— do ——— Dotacamund to Nedderimettum

(4) ——— do ——— Nedderimettum to Gudalore

(5) ——— do ——— Kotagherry to Coonoor.

2. These roads have been entered in the Budget without the amount of maintenance for them, as the Nilgiri Local Fund Budget for the current year has not

not been supplied to this Office
The Chief Engineer will therefore
be so good as to have these amounts
filled up in his Office if the work
is to be undertaken by this De-
partment.

Lt Col R.E.
Superintending Engineer
Coimbatore
28th Sept 1882

IV Circle

D. No. 668

5th Circle.

Provicial Services

Budget Estimate

for 1883–84.

2 - 10 - 82

Provincial Services

Public Works Budget Estimates

No 2367

Part I

Detail of the Budget Estimate for Original Works

5th Circle

Class 1 Works.

under Provincial Services for the year 1883-84.

Head of Classification	Description	Locality	Amount	Original Grant 1883-84	Outlay	Amount of Estimate	Remarks and References
Provincial Courts and Public Buildings	Government House Banqueting Hall Permanent Verandah and Roof to the	Mount Road	1/	6500		6500	Estimate will be submitted. Item No 12 of Budget 1882-83 Class A.
Do	Do	Do	2/	3000	3000	3000	Item No 7 — Do — Do
	Government House Furniture plate and	Do		1000	1000	1000	Do — 6 — Do — Do
	Do	Do				10,500	
Land Revenue Buildings	Kingsgate Cutcherry.	South Mount Road	3/	16470	19770	16470	Item No 266 of 26th October 1876
	Cutcherry for Collector & Sub Collector	South Mount Road	4/				Items No 3 of Budget 1882-83 Class A
						16470	10500

Head of Classification	Locality	Name of Estimate	Project proposed for Work &c.	Outlay Granted 1883–84. Amount	Expenditure Amount	Remarks & References
South Africa	Durban	5	Providing additional accommodation for the Sub Collector	5835	5835	Sanctioned vide G.O. No. 2294 dated 6th September 1882.
13 Marine Department	Straits of Madras	6	Government Central Museum & Providing Lighting Conductor	2850	2850	G.O. No. 1946 dated 8th August 1881 Item 26 of Budget 1882–83. Class B.
14 Law and Justice	Chingleput	7	Additions to the District Moonsiff's Court	5560	5560	G.O. No. 2153 dated 31st August 1881. Item No. 28 of Budget 1882–83. Class B
15 Ecclesiastical	Straits of Malacca	8	Sealed Pink boundary mark with the Castle Hill listed off—	4885	4885	Sanctioned in G.O. No. 2273 dated 4th September 1882.
9 Medical Necessary attention		9	General Hospital and Lunatic portion thereof including out patients Dispensary establishment &c.	21071	21070 46/100	Estimate has been sent for approval of the Surgeon General

Head of classification	Estimate No.	Locality	Number of Plans	Project and Works	Outlay	Grant 1882-83	Remarks and Reference
(19) Med. Faculty		Presidency, Madras	10	Laboratory of the Government Chemical Examiner	22500	5 22500 ✓ 10	The Estimate has been submitted to Engineer with letter No 2237 dated 19th September 1882.
			11	Repairs, urgent Report Hospitals			285
			12	Construction of Women & Children Hospital at Coimbatore	17030	3 17030 ✓ 11	Do with letter No 2257 dated 21st September 82.
			13	General Hospital Civil Portion water Supply	6110	4 6110 ✓ 12	Sanctioned in G.O. No 2270 dated 6th September 1882.
20) Miscell.			14	Marine Block Officers Quarters &c.	3400	13	Estimate will be submitted.
					not entered in budget for current year	70110	
					3500	14	Estimate not to be provided yet.
					not entered in budget for current year	3500 11620	

Head of Establishment	Division	Sub-Division	Sub-Sub-Division	Original Work	Repairs	Number	Remarks & Reference
			Tropical Coast Works				
South Shropshire Coal-fields			Electrical Engineer's Office. Constructing the	4200	3500	15	Sanctioned in G.O. No 1777 dated 13th July 1882.
			Mineral Line Works	4200	3500	16	Includes Mineral Works of the Police Dept.
Pembroke			Do.	19670	16100	17	Do.
Kingsport			Do.	4500	2000	18	
					32650		

Total Original Works Civil Buildings 15550.

3583

Head of classification

Estimated Revenue

Estimated Charges

Estimated Net Revenue

Outlay

Amount Expended to 31st March 1882-83

Amount Required to complete

Total Amount

Net Outlay

Remarks & Reference

Navigable Canals

Buckingham Canal

Original Works

19 Buckingham Canal

£ 1890 105555 19 Schedule showing the distribution of the proposed grant is attached.

287

Revenue

Nil

Buckingham Canal

1990 5000 20

Total Navigable Canals

£ 1890 105555

Head of Classification

Expenditure

Receipts

Net Expenditure

Project and Works

Remarks & Reference

Outlay Grant 1869-70

Estimated Cost

Expenditure to 31st March 1869

Expenditure during 1869-70

Total Expenditure

Estimated Saving (+) or Excess (-)

Remarks & Reference

Provincial Outlay

Surveys & Navigation for Inland Capital and Revenue Accounts not Applic.

Mir Pak Shahanwaz

Original Works

Water Supply (Storage &c.)

21 Madras Water Supply and Irrigation Extension Project

1842/50 63453 32525 23700 21

G.O. No 1249 dated 6th G.O. No 1976 dated 19th June 1871. Sanctioning Revised Estimate of the Project

96 96

22 Mayer & Vaurian

Connected with 96

3000 22

Total Expenditure to be charged to Original Works

32525 21700

23
2378

Provincial Canal.

Ports

Fifth Canal

Detail of the Budget Estimate of Repairs to Public Works for the Provincial Canals for the 5th Canal for the year 1853-54.

Head of Classification	Details	Results	Items	Estimate 1853-54	Estimate 1854-55
				Amount Total Amount	
			5th Canal Buildings		
Residence Keeper South Shore		Annual	Repairs	5370	4700
				600	600
				1500	1495
			Total 5th Canal Buildings	6470	5805
			Communication		
Residency		Annual	Repairs	1853	1853
			Total Communication	1853	1853
			Maintenance of Locks		
Residency		Corderoy Jr in A.C.W.	1st Comm Rainer Shanahan 1922 Dr Patrick 3rd Dromkeen Total Attendance 12th Locks	3000	3000
				3000	3000
Navigable Buckingham Canals Canal		Navigation of Navigable Canals	Permanent Capital and Revenue per Robt Symmes.		
			Maintenance Repairs		
		Maintenance of Locks on Southward to 1st per Report 10 per mile for 21 miles	Keeping Canal from Attention of Commissioner Canal 28 Miles mile for 61 miles @ £4 0.75 miles	6365	6365
				6365	6365

Head of Class. Explanation	Division	Subdivision	Item	Estimate 1880-84 Amount	Estimate 1880-84 Total	Estimate 1882-83 Amount	Estimate 1882-83 Total
			Grant for Minor Repairs to Bridges Basins &c and Buildings	500		500	
			Total Provincial Irrigation & Navigation - Revenue Repairs		6565		6565
			Irrigation Works for Civil & Revenue &c not Kept				
			Repairs				
Water Supply	Irrigation	Madras Water Supply & Irrigation	Supply and Service	8700			
			Total Prov. & Irrigation Repairs		8700		

290

Provincial Service

Detail of the Budget Estimate for the 5th Circle for the year 1883-84.

Part III

5 Circle

Tools & Plant under Provincial Services in

Divisions	Hand Tools	Office Furniture	Scientific Apparatus	Pile Driving Plant	Railway Carriages	Total 1882-83	Estimate 1883-84
Chinglepet Div.						500	600
Superintending Division — Repairing Roads Bridges Clocks per Pr. G.O. No 80 dated 12th August 1875 and No 3468 dated 18th December 1876						800	800
South Arcot Div.						1500	1344
						2100	2600
Total						4900	5344
Irrigation & Navigation Buckingham Canal						10836	3584
Grand Total						23736	8928

3,488

291

Chief Engineer & Secretary to Government

Superintending Engineer 5th Circle

* The permanent establishment of the Buckingham Canal is entertained on the understanding that Engineers will be obtained from England for 1882-84.

Chief Engineer & Secretary to Government

Superintending Engineer 5th Circle

Chief Engineer's Pumping Tools & Plant Required

150

293

291

294

270

Provincial Services
Public Works Budget Estimate

Detail of the Budget Estimate for the year 1883-84.

Part I

District

for Original Works under Provincial Services

Nos of Classification	Estimate Division	Locality	Item No.	Project of Works	Amount of Estimate	Outlay Actuals up to 31st March	Outlay Probable during 1883	Grant for 1883-84 Amount	Total	Item No.	Remarks and References
Provincial Services Imperial Jails	Provincial Jails	Palamcottah / New Jail			208000	94,558	40,000	40,000	A	1	G.O. No. 1723-W. 3-5-82. Item No. 32. Class A. Works of 1882-83 Budget.
		Sankaranaigen Koil. / Building Quarters to the Jail			Jail 39,00			3900	B. 43900	2	G.O. No. 1907-W. 19-7-79. Item No. 49. Class B. Works of 1882-83 Budget
		Elevation / New Cart Shed			Taluk office 10275			10275	C 10,275	3	G.O. No. 1353-W. 12-5-79. Item No. 23. Class B. Works of 82-83 Budget.
									Carried over		54175.

Head of Classification	Locality	Item No.	Project and Work	Amount of Estimate	Actual Expd. 1st April 1881 to 31st March 1882	Outlay Budget Estimate 1882-83	Grant for 1882-83 Amount	Total	Item No.	Remarks and References
			Brought forward					54175		
Provincial Police	Serampore	4	Police Hants	1100	—	—	1100	1100	4.	G.O. No. 3023-N dated 5th December 1881 Item No. 4 in the Statement of Uncompleted Works for 1881-82 printed with G.O. No. 1705 N of 77
			Grand Total					55275		

Superintending Engineer Official Circle
Richmond 29 September 82

L. Beatty - Col. R.E.
Superintending Engr. L.C.

Abstract of the Grants proposed for all Original Works (Major & Minor) to be distributed by the Public Works Depart.

297

Grain Mess	Annual	Special	Total
Civil Buildings	55275		55275
Total	55275		55275

Richmond
29 September 72

L. O'Beirne Colle
Superintending Engr

6: Kirkella

Minnevelly District

Part I 29: 1: 1: 1:

Provincial

Part I

Detail of the Budget Estimate for repairs to Public works for the year 1883-84

Minnevelly District

Part II

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate of Repairs to Public Works under Provincial Services for the year 1883-84.

Head of Classification	Estimate 1883-84 Amount	Estimate 1883-84 Total	Estimate 1882-83 Amount	Estimate 1882-83 Total
Provincial Services Miscellaneous				
Civil Buildings				
Annual repairs	500	500	500	500

Tinnevelly
9 September/82

R. Beatty - Col. R.E.
Superintending Engr. P.W.D.

Tamworth District
Part V

Provincial Services
Public Works Budget Estimate

Detail of the Budget Estimate for Tools & Plant, Provincial Services for the year 1883-84.

Executive Division	Buildings & materials - Steel bar - Ironmongery	Tools	Plant	Office Furniture	Camp Equipage	Live Stock	Repairs & Carriage of Plant 1883-84	Estimate 1884-85	Remarks
Tamworth Div	770	1920	120				190	3300	3300

Richmond Poly 2
29th September 1883

L. Beatty - Col RE
Superintending Engr 6th

Tamworth District

Part II

Provincial

Public Works

Estimate

1884-85

6th Circle

Miscellaneous District

Part 2 of September

Provincial

Part IV

Detail of the
Schedule for
and Plant for
year 1912-13

Provincial Services
Public Works Budget Estimate

Tarsine District
Part I

(Detail of Budget Estimate for Original Works under Provincial Services for the year 1883-84

Head of Executive Classification Division	Locality &c	Property	Works	Amount of Estimate	Actual Outlay during 1883	Probable Outlay during 1883	Grants for 1883-84. Amount	Total	Item &c	Remarks & References.
			Provincial Civil Buildings Original							
Provincial Services Imperial Administration	Tarsine Headquarters	1 Deputy Commissioner's Catchery	Public Buildings	9,020		4,000	5020	5020	1	G.O. No. 1981-W 10-8-81.
	Negapatam	2 Sub Collector's Catchery	Catchery	11,560			5000	10,020	2	G.O. No. 22 of 26-3-77 Item No. 20. Class B Works of 1882-83 Budget
Law & Justice	Tarsine Taluk	3 District Court	Court houses	11,900		7,900	4,000	11,900	3	G.O. No. 3165 6-11-75. Item No. 25 class A Works of 1882-83 Budget.
	Negapatam	4 Sub magistrate's Cutcherry	Cutcherry	9,365			5000 4365	8365	4	G.O. No 1505 dt 25th March 1878. Item No. 38. Class B works of 1882-83. Budget
								18,305		

Carried over 18,305

Head of Classification	Executive Division	Locality	No.	Project or Work	Amount for Estimate	Outlay	Amount for 83-84	Total	Item No.	Remarks and References
				Brought forward				10,835		
Provincial Services Imperial Jails	Lavpne	Lavpne 8th		District Jail	20,000	2,500	7,500	10,000	5	Item No. 31 Class A Works of Budget 82-83 - Estimate will be submitted shortly
Miscellaneous	Do	Do	6	Divisional Hqrs	10,835	5000	5,835	5,835	6	G.O No. 2822-W / 14.11.81. Item No. 53. Class B. Works of 1982-83 Budget.
				Grand Total				126,220		

Spec Chimney
38' height

Lt Beatty - Bl RE

Superintending Engr 6th

R 300

300

Abstract of the Grants proposed for all Original Works (Major and Minor) to be distributed by the Public Works Department

	Remarks	Total
Main Road		
Civil Buildings		12220
Tajchindi 30' depth		
Executive		6000
Superintending	Engr	66

6 Clock

Part I

Tanjore District
Part II

Provincial Services
Public Works Budget Estimate

Detail of the Budget Estimate of repairs to Public Works under Provincial Services for the year 1883-84.

Head of Classification	Division	Locality	Items	Estimate 1883-84 Amount	Estimate 1882-83 Amount	Total	Remarks
			Civil Buildings.				
Provincial Services Miscellaneous	Tanjore		Annual repairs	250	250	250	250
2nd	Tanjore	Tanjore Palace repairs					
			(Special)	20,000	20,000	20000	20,000
			Annual repairs to do	4000	4,000	4,000	4,000
	Kumbakonam	Thirunageswaram					
	Mannargudi	Palace repairs (Special)		2354	2364	4000	4,000
	Negapatam		Annual repairs	200	200	200	200
			Total		26,804		28,450

The Revised Estimate for the Tanjore Palace repairs is about to be submitted.

Specimen of 30th Sept 1882

L. Beatty - Col. R.E.
Sup. Engineer & Collector

6 Circle

Pembroke District

Date 30 Nov 82

Provincial Services

Part II

Detail of Budget
Estimate of Expenditure
for Public Works
for 1883-84.

303

Provincial Services

Public works Budget Estimate. Part

Detail of the Budget Estimate for year 1880-81.

Head of classification	Locality	Project and works.	Estimate	Outlay	Grant for 1880-81	Remarks and references.
Provincial Services Imperial administration		Provincial Ordinary Road Buildings Original works.				
Lunatic Asylums	Provincial	Trichinopoly 1/ Second Class Lunatic Asylum	27,000	10,000	17,000	1 G.O. No 278 of 20th July 1878. Item No 15, Class A works of 1878-79 Budget.
		Trichinopoly 2/ Constructing a Lunatic Asylum in the Collector's Cutcherry	2,760	2,760		2 Plan & Estimate will be forwarded shortly.
		Chingleput 3/ District Municipal Fund	12,000	10,000	2,000	3 G.O. No 1111 of 25th August 1880. Item No 11 Class A works of 1880-81 Budget.
		Tuticorin 4/ District Municipal Fund	16,000	5,000	11,000	4 Plan & Estimate will be submitted shortly.
Jails.		Trichinopoly 5/ District Jail	109,200	20,000	20,000	5 Plans sent to the Inspector Genl of Jails with letter No 38 T.C. of 15th August 1880.

Carried over 55,760

Trichinopoly District.

I.

Original works under Provincial Services for the

Head of classification	Locality	Project as worked	Outlay	Grant for 1883-84.	Remarks and references.
Provincial Services. Imperial Miscellaneous	Thoothoo Jagannaicken	1/ Sub Registrar's office —	2,678	2,000	6 Plans & Estimate forwarded with letter No 5028 dated 8th September 1882.
		1/ Sub Registrar's office —	2,120	2,000	7
	Kulitalai	2/ Proposed additions for Sub Registrar's office &c. the Salary Establishment —	2,678	2,000	8 Plan & Estimate under preparation in the Division office.
	Dindigul	3/ Sub Registrar's office —	2,200	2,200	9 Plan & Estimate under preparation in the Division office.
		10/ Grant for minor original works to be placed at the disposal of the Collector of Madura —	Nil	5,000	10
		Brought forward	55,116		
		Grand Total —	1,05,116		

F. Beatty - Lt. R.E.
Asst. Engineer in Charge.

Examined by
[illegible]

abstract of the grants proposed for all original works (Major and Minor) to be distributed by the Public works Department.

Main Head	Estimated	Grant	Total
Civil Buildings	6,50,000	"	6,50,000

Secretariat
29th September 52

Lt Beatty-Asst RD
Supt Engineer Circle

Trichinopoly District.

Part II.

Provincial Services.

Public works Budget Estimate.

Detail of the Budget Estimate of Repairs to Public works under Provincial Services for the year 1923-24.

Head of Classification	Estimate 1922-23		Estimate 1923-24	
	Imperial	Local	Imperial	Local
Provincial Services.	Civil Buildings.			
Provincial				
	—	700	700	700

Trichinopoly
29th September 1923

L. Beatty - Col. R.E.
Supdg Engineer Trichy.

Trichinopoly District

Dated 29th September 1923

Provincial

Part I.

Detail of the Budget Estimate for Original works for the year 1923-24—

E. D. Circle.

Trichinopoly District

Dated 29th September 92

Provincial
Part II.

Detail of the Budget estimate of expenditure on Public works under Provincial for the year 1893-94.

Trichinopoly 30th September 1892

Provincial Services.
Public Works Budget Estimate.
Detail of the Budget Estimate for the year 1893-94.

Protective Irrigation.	Sweeping chattrams & subsidiary	300	300	300	
	Machinery				
	Tools				
	Plant				
	Office furniture				
	Cattle				
	Live Stock				
	Repairs & Damage	300	300	300	
	Total for 1893-94				
	Estimate 1892-93.				

Trichinopoly 30th September 1892

Executive Engineer
2nd Division Public Works

Tanjore District

Part V

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate for Tools & Plant under Provincial services for the year 1912-13.

Executive Division	Imprest & Contingent including Establishment	Machinery	Tools	Plant	Office Furniture	Camp Equipage	Live stock	Repairs & Renewals	Total 1911-12	Estimate 1912-13	Remarks
Tanjore	500	.	400	.	200	100	.	300	1500	1500	
Negapatam	250	.	150	.	100	120	.	600	1220	1175	
Total	750	.	550	.	500	220	.	900	2720	2675	

Transmitted by
the Superintending Engineer

P. Beatty - Collr & Dt Magte
Supdg Engineer & Local Fund

Public Works Budget Estimate

Detail of the Budget Estimate

Provincial

Part III.

6th Circle

Jacques District

Dated 30 September

Province of Liberia

Part II

Abstract of the Budget
Estimate Expenditure
Public Service
for 1833-34.

319

200

Provincial Services

Public Works Budget Estimate

Madura District.

Form I

Detail of the Budget Estimate for Original Work under the Provincial Services for the year 1883-84.

Head of Classification	Locality	Project of Work	Provincial Original Civil Buildings Original Work	Estimated Cost	Outlay Grant 1883-84				Remarks and reference
					Actual Expenditure 1881-82	Actual Expenditure 1882-83	Amount	Total	
Provincial Services Superintendence Administration									
Madura	Cathampatti 2/ — 0. — Rs			— 11993			2	11993	G.O. No. 515 W. of 31st February 83 Item No. 18 Class 13 Works of 1882-83 Budget.
	Vedasandur 3/ — 0. — Rs			— 11923			3	11923	G.O. No. 515 W. of 31st February 83 Item No. 19 Class 13 Works of 1882-83 Budget.
	Nadiccottai 4/ — 8. — Rs			— 19100		5000	14100	19100	Plan & Estimate are under examination in this office and will be submitted shortly.
	Tirumangalam 5/ Sub Magistrate's Cutchery			19100		4500	4000	4000	G.O. No. 2915 W. dated 30th November 1879
Court Justice									

Head of Classification	Division	Sub Division	Locality	Sub Division	Project and works	Amount	Total Amount	Total	Remarks and References.
Provincial Service Imperial Jails					Brought forward				
			Madura		61 Contract Jail. Rounding accommodation for female prisoners Staircase and Cut Stone flooring	11,308	9495 1813	1111	6 { G.O. N° 1330 W. dated 29th May 1902
Miscellaneous			Madura		7 Conservation of Nayak Palace	10,000	10,000	7	{ Madura No 43 Class A works of Rs 10,000 to be taken in hand as per G. Chief Engineer's Memo No 1779 dt 5th October 1903
	Irrigation		Tirumangalam	8	Sub Registrar's Office	2,300	2,300	8	{ Estimate under preparation with the Board Office
			Melur	9		2,300	2,300	9	
			Tirumohaly	10		2,300	2,300	10	
			Thirupattur	11		2,400	2,400	11	{ Estimate forwarded to the Inspector General of Registration with Letter No 3874/3 of 3rd October 1903
			Shivagangai	12		2,100	2,100	12	{ Plan and Estimate forwarded to the Inspector General of Registration with Letter No 3867/3 of the 3rd October 1903
							11,600		
					Carried Over		42,408	5,982	

Head of Classification	Estimated Quantities	Unit of Measurement	Locality	Project & works	Outlay Granted 1883-84 Amount	Total	Remarks and References
Provincial Services Imperial Miscellaneous Establishments				Brought Forward	44,00	55,562	29
			Ramanad to Sub Registrar's Office		2,300	2,300	13 Estimate under preparation in the Dev. Office
			Ludigul to		2,100	2,100	14 Plan & Estimate forwarded to the Inspector General of Registration with letter No. 366 dated 3d October 82
			Vilacolli to		2,300	2,300	15 Estimate under preparation in the Dev. Office
			Chinnamanai to		2300	2,400	16 — Do. — Do. —
Metalled and Bridged Roads			Communications Original Works	Total Civil Buildings		71,962	
			of Completion of the Road from Cumbum to Gudalur Ghat		72,183	2,700 13,100 2,000	17 Gen. Abstract Summary Statement & Detail Estimate of Original Works of 1882-83 Budget
			18 Chattanum to the Gudalur Ghat		4,00	4,00	Gen. Abstract 12 April 1877 Item No. 55 Class 16 Workings 1882-83 Budget
				Total Communications		24,000	
				Grand Total		179,962	

Superintending Engineer's Office
Trichinopoly 24 October 1882

Superintending Engineer

Lieut Col RE
Executive Engineer

Abstract of the Grant proposed for all Original Works (Major & Minor) to be distributed by the Public Works Department

Main Head	Provincial Services	Local	Total
Civil Buildings	11,500		11,500
Communications	24,000		24,000
Total	35,500		35,500

Superintending Engineer's Office
Trichinopoly Division

6. Kwale

Dated 26th October/20

Medium District

Provincial Services

Part I

Return of the Annual Estimates for Original Works for 1920-21.

Provincial Services
Public Works Budget Estimate

Madeira

Ponta

Detail of the Budget Estimate for Services for the year 1883-84

Provincial Ordinary
Civil Buildings
Original Works

Head of Classification	Locality	Repairs and Works	Outlay	Grant 1883-84	Remarks and references.
Madeira	Relvinha	1 Deputy Inhabitants	Building 11,528	11,528	1 Gov. 515 W. 9th Feby 1883 Item No 17 Class B. Works of 1882-83 Budget
	Cottamphilla 2	do do	do 11,993	11,993	2 Gov. 515 W. 9th Feby 1883 Item No 18 Class B Works of 1882-83 Budget
	Vedra Ilha 3	do do	do 11,528	11,528	3 Gov. 515 W. 9th Feby 1883 Item No 19 Class B Works of 1882-83 Budget
	Kodaikanal 4	do do	do 19,110	5,000 14,110	4 Plans & Estimate are under Examination in this Office. and will be submitted shortly
				49749	

Head of Classification	Locality	Project and Works	Outlay	Remarks and references
			Estimated / Expended during 1883-84 / Actual Total to end of 1883-84 / Approved Estimate 1884-85 / Estimated Future Requirements	
Provincial Civil Imperial Law and Justice		Brought forward	19749	
Jails	Trivandrum Sub Magistrate's Cutchery		6,000	Con. 2915 W dated 20th November 1879
	Madura 5th District Jail Remodelling accommodation for female prisoners & Sub Jail Cutchery floorings		9,495 1,815 1,815 6	Con. 1320 W dated 29th May 1882.
Miscellaneous	Madras Renovation of Chief Engineer's House		18,000 10,000 20,000	Memo No. 63 Class A Code of Budget 1882-83 and the Estimate is being recorded and referred to Chief Engineer's Memo No. 1799 C of 31st October 1882
	Rameswaram Sub Registrar's Office		2,500	8 Estimate under preparation in the Secretariat
	Melur		2,500	9 Do
	Tirumbuvanam		2,500	10 Do
	Srivaikuntam		2,400	11 Estimate forwarded to the Inspector General of Registration with Collr's No. 267 Jud. of 23rd October 1882
	Carried Over		19,310	53,82

Head of Description	Locality	Project and Works	Outlay Brought forward			Remarks and references
Provincial Garrison Imperial Miscellaneous Combined		Brought forward	£ 39,000	15,562		
	Shorncliffe	Sub. Registrar's Office	— 500	. . 2,000	12	Plan and Estimate forwarded to the Inspector General of Fortifications with letter No 367 R.E. of the 2nd October 1882
	Ramsgate	Do — Do —	— 2,000	. . 2,500	13	Estimate under preparation in the Div. Office
	Dundigate	Do — Do —	— 2,100	. . 2,100	14	Plan and Estimate forwarded to the Inspector General of Fortifications with letter No 366 R.E. dated 2nd October 1882
	Hilsea Ridge	Do — Do —	— 2,300	. . 2,300	15	Estimate under preparation in the Division Office
	Chatham	Do — Do —	— 2,300	. . 2,300	16	Do — Do —
				49,100		
				15,962		

Lieut Col RE
Supt Engineer 6 Circle

Supt Engineer's Office 6 Circle
Rochester 17th October 1882

Abstract of the Grants proposed for all Original Works (Major and Minor) to be distributed by the Public Works Department.

Main head	Provincial Services	Local Total	
Civil Buildings	105,962	-	105,962

Superintending Office
17th October 52

Lieut Col RE
Superintending Circle

From

The Supp. Engineer

6th Circle

To

The Chief Engineer

D. P. W.

Dated 17th October 1882

Received

Madeira District

Provincial Services

Part I

Detail of the Budget Estimate for Original Works for the year 1883-84

Madeira District

Part II

Provincial Services

Public Works Budget Estimate

Detail of the Budget Estimate of Repairs to Public Works under Provincial Service for the year 1883-84

Head of Classification	Sanctioned Quantities	Sanctioned Rates	Items	Estimate 1883-84 Amount	Estimate 1883-84 Total	Estimate 1882-83 Amount	Estimate 1882-83 Total
							330
Provincial Services Provincial Usually maintained			Civil Buildings				
			Annual Repairs	100	100	100	100

Sup. Engineer's Office
Funchal 17th October 1882

Lieut. C.R.E.
Superintending Engineer
6th Circle

Provincial Services
Public Works Budget Estimate

Madeira District
Part IV

Detail of the Budget Estimate for Tools and Plant and Stores Provincial Services for the year 1883-84.

Executive Division.	Superintending Engineer's Office Establishment	Workshop	Tools	Plant	Office Furniture	Camp Equipage	Live Stock	Repairs to Carriages	Total Estimate 1883-84	Total Estimate 1882-83	Remarks
Madeira—	600	. . .	100	. . .	300	1000	2,000				

Superintending Engr's Office
Funchal, 17th October 1882.

Lieut Colonel
Superintending Engineer

To: The Chief Secretary to Government

Sir:

I have the honor to forward herewith Part II Detailed Estimate for Tools and Plant for the year 1883-84.

Madeira District
Provincial Services
Part II
Detailed Estimate for Tools and Plant for the year 1883-84

From,

The Supt Engr
6th Circle

To,

The Chief Engr
P.W.D.

Dated 17th October 1892

Received

Madura District

Provincial Service

Part IV

Detail of details Budget
Estimate for Roads
Plant for the year
1893-94

No 399 M.D.

Superintending Engr's Office 6th Circle
Trichinopoly 26th October 1892

From,

The Superintending Engineer
6th Circle

To,

The Chief Engineer
P.W.D.

Madura.

Sir,

With reference to your Memo-
randum No 1895 of the 21st Instant
I have the honor to inform you that
the work of Completing the road
from Cumbum to the foot of the
Ghat was omitted, by
an oversight, in my Provincial
Budget of the Madura Division
forwarded on the 17th October, +
I therefore now submit an
amended Budget to be substituted

for the one already forwarded.

I

I have the honor to be

Sir

Your most obedient Servant

Lieut Col RE

Superintending Engineer 5th District

323

Coimbatore Camp
Government House
Madura
Ootacamund
8th September 1882

No 264

From

The Private Secretary
to His Excellency the Governor

To

The Secretary to Government
Public Works Department

Sir,

I have the honour to
forward herewith in duplicate
the Budget Estimate of the
probable expenses on account
of Furniture required for
Government Houses at Madras
Guindy Ooty & Kodaikanal
for the year 1883-84.

I have the honour to be
Sir,
Your most obedient servant
A Cadogan Captain
Aide de Camp

From
the Asst Engineer
to Guindy

To
the Chief Engineer
P. W. D.

No 299 dated
Dated 7th October

Submitted.

Budget Estimate
for Original works
under Provincial
for the year 1883-84.
Guindy Bungalow

Estimate received

8

325

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—the following paper :—

From G. HAMNETT, Esq., Inspector-General of Registration, to the Chief Secretary to Government, dated Madras, 31st August 1882, No. 1964.

I have the honor to transmit, for the consideration and sanction of the Government, the Budget Estimate of receipts and charges of the Registration Department for the year 1883-84. The estimate, as directed in Financial Department Order, No. 1928, dated the 8th October 1881, includes also the estimated receipts and charges in connection with Joint Stock Companies. My remarks, however, will be confined to the Registration Department, as I exercise no supervision or control over the Registrar of Joint Stock Companies.

2. The estimated receipts for 1883-84 aggregate Rs. 6,20,000 and the charges Rs. 5,05,582, against Rs. 5,90,000 and Rs. 4,57,100, the items for the current year.

3. The number of special offices from which receipts from registration are expected during the ensuing year is estimated at 257 against 230 in this year.

4. The estimate of receipts is based not only on the increased number of special offices, but on past actuals. The average receipts per annum during the five years ending 1881-82 amounted to Rs. 5,31,163. The estimate for 1882-83 is for Rupees 5,90,000 and that for 1883-84 is fixed at Rs. 6,20,000, or an advance of Rs. 30,000 over 1882-83. This advance may be safely reckoned upon, as the actuals for the first four months of the current financial year amount to two lakhs.

		Rs.
Actuals	1879-80	5,20,178
	1880-81	5,71,535
	1881-82	5,53,176
Estimates	1882-83	5,90,000
	1883-84	6,20,000

5. The estimated charges for 1883-84 aggregate Rs. 5,05,582 against Rs. 5,70,555, the average per annum for the five years ending 1881-82, and Rs. 4,57,100, the estimate for 1882-83. The increase is caused by an addition to the office establishments of the Inspector-General and the Registrar of Madras; by an increase to the pay of Registrars and Special Sub-Registrars; and by provision having been made for an additional number of twenty-seven Special Sub-Registry Offices, many of which have already been sanctioned.

		Rs.
Actuals	1879-80	3,67,866
	1880-81	3,97,632
	1881-82	4,32,164
Estimates	1882-83	4,57,100
	1883-84	5,05,582

3. The estimate of charges are distributed under the following heads, viz.:—

	Receipts for		Increase.
	1882-83.	1883-84.	
	Rs.	Rs.	Rs.
I. Inspector-General of Registration	20,012	27,272	6,260
II. Registrar of Walwa	1,422	1,858	436
III. Sub-Registrars and Sub-Registrars	5,67,000	[illegible]	[illegible]
IV. Contingencies	8,14,000	[illegible]	1,000
V. Miscellaneous	56,320	56,680	672
Total ...	6,97,354	6,56,302	46,357

The increases under the first, second, and third heads have been sanctioned by the Government in their Orders in the Judicial Department:—

No. 2123, 19th October 1881.
No. 2427, 5th December 1881.
No. 347, 23rd June 1882.

The commission at 10 per cent. on the anticipated receipts is Rs. 2,79,000, but judging from past actuals, and allowing for the reduction of the maximum commission payable to Registration Officers from Rs. 100 to Rs. 50, it is not likely that more than Rs. 2,11,000 will be required during 1883-84.

The increase of Rs. 672 under Miscellaneous (V.) is due chiefly to an increase of Rs. 2,200 under Office-rent, Taxes and Taxes, and a decrease of Rs. 1,000 under Fixed Stationery Allowance for Registrars and Sub-Registrars.

7. The estimated value of articles supplied without payment but debited to this department is Rs. 600, and of articles supplied but the value [illegible] as debited is Rs. 32,000.

8. The Superintendent of the Government Press will, under the Orders of Government, Financial Department, No. 2776, dated the 14th November 1881, provide for the binding and printing work required by this department; and the Public Works Department will, it is presumed, provide for all the new Registration Offices already sanctioned, and for those which will be sanctioned in the course of this and the next year.

9. The charge (Rs. 6,000) for petty construction and repairs included under the head of Miscellaneous has been reduced as compared with the estimate (Rs. 8,000) for 1882-83 by Rs. 2,000.

10. I request that the sanction of the Government may be obtained for the following:—

Registration.

	Rs.
Receipts	6,25,000
Charges	5,06,180
Joint Stock Companies.	
Receipts	5,000
Charges	769

ORDER—dated 27th September 1882, No. 1305, Financial.

The anticipation of Government that the receipts for the current year would realise Rs. 5,30,000 appears likely to be confirmed, as the receipts for the first four months come to two lakhs of rupees. The Inspector-General reckons that there will be an advance of Rs. 30,000 on that amount next official year, and the Government concur in his estimate.

2. The estimate of charges, including the value of articles supplied without cash payment, is set down at Rs. 5,06,180, showing an increase of nearly half a lakh. This is due to sanctioned additions to establishment. The latter part of paragraph 8 of the Inspector-General's letter will be considered in the Public Works Department. The Government in this department attach much importance to the early completion of the new Registration Offices, and it is suggested that, as in the current year, funds, the amount of which might be determined in communication with the Inspector-General, should be held in reserve from the Provincial grant placed at the disposal of the Public Works Department.

		Receipts. Rs.	Charges. Rs.
Joint Stock Companies.			
Actuals	1879-80	...	...
	1880-81	2,839	384
	1881-82	5,227	625
Estimates	1882-83	4,629	766
	1883-84	5,000	769

3. The estimates of the Registrar of Joint Stock Companies are passed as submitted.

4. The estimates are sanctioned as shown below:—

Against Receipts.

	Rs.	Rs.
Imperial—Provincial		
	6,20,000	
	5,000	
Receipts		6,25,000
	5,06,180	
	769	
Charges		5,06,849
and against Provincial—		
Petty Works of Construction and Repair		6,000

(True Extract.)

C. G. MASTER,
Chief Secretary.

To the Inspector-General of Registration.
" Public Works Department.
" Accountant-General.

Rich. A. F. Goodall.

No 2746 W dy 21 st Octr 1882

Recorded
a sum of Rs 17000
will, as on previous
years, be provided
in the P.Work Prond
Budget for 1883-84
for the Construction
of new Registration
Offices

Tender 125
14-10-82

Exec. E. W. Asst
Supdg Engrs
Supt Govt Stage
Financial Supt

Govt. of [1882] Madras.

FINANCIAL.

G.O., 27th September 1882, No. 1305.

No 2746 W dy 21st Oct

SEPTEMBER.

Budget Estimate.

Financial Dept

PROCEEDINGS of the MADRAS GOVERNMENT.

READ the following

Statement of the Public Works Department
dated 31st November 1882 No. 2205. C.

Order thereon 23rd December 1882 No. 2040 (Civil)

Communicated to the Accountant
General who will adopt the figures given
by the Public Works Department
Civil budget Estimate for 1883-84,
& modification by Government on
passing the Civil Estimates with the
& the estimated balance in hand.

(True Extract)

Chief Secretary

To the Public Works Department

Govt. of (1883) Madras.

Financial Dept

To

Proceedings, dated 1883.

No.

Subject.

No 261 Wal 23/1/83

1

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—the following papers—

From Colonel H. D. CLOSTE, Inspector-General of Police, to the Chief Secretary to Government, dated Madras, 1st December 1882, No. 6174.

With reference to paragraph 4 of G.O., No. 1656, dated 13th November 1882, Financial Establishment, I have the honor to forward, for approval, the accompanying statement of the sum of Rs. 46,000 passed in the Police Budget for "Petty Construction and Repairs" for 1883-84.

ENCLOSURE.

Estimate of 1883-84 of the Cost of Construction and Repairs of Public Buildings through Departmental Agency.

District.	Description of Work.	Actuals 1881-82.	Estimate. 1882-83.	Estimate. 1883-84.
1		2	4	5
		Rs. a. p.	Rs.	Rs.
Madras City	New Works	1,317 8 0		
	Repairs	1,417 5 0	2,000	2,000
				80
Ganjam	One Station-house at X Town (Oriya).			45
	One Rest-house do.	302 8 0		150
	Six Police huts do.		750	2,400
	Repairs	1,054 8 3	1,246	
Vizagapatam	New Works	775 0 0	1,000	700
	Repairs	912 5 6		75
				150
	One Station-house at Rajahmundry.			45
	Two huts do.			110
	Palisade (330 yards) do.			
	One Station-house at X Co-pallem.			250
Rajahmundry	Two blocks of huts at Kotapallem.			80
	Palisade (352 yards) at Kotapallem.			

Estimate of 1883-84 of the Cost of Construction and Repairs of Public Buildings through Departmental Agency—continued.

District.	Description of Work.	Actuals 1881-82.	Estimate.	
			1882-83.	1883-84.
1	2	3	4	5
		Rs. A. P.	Rs.	Rs.
Anantapur—contd.	One Inspector's house at Tadpatri.	1,633 3 6	..	200
	Conversion of the Inspector's shed into a house at Dharmavaram, with addition of out-houses.	..	..	100
	One Station-house at Pulivendla.	..	..	70
	One temporary shed for Inspector at Kondapuram.	..	..	100
Bellary	A well at Chellakurki	183 0 0	200	200
	Repairs	3,344 6 1	3,700	3,000*
	One Station-house at Pilicode.	301 11 5	300	400
	One Station-house at Beypore.	..	..	200
Ellore	One Station-house at Bellipalle.	..	..	200
	Repairs	..	800	200
	One Station-house at Polavaram.	881 0 1	900	200
Kellore	Repairs	1,061 0 1	1,000	200
	One Station-house at Kandukur.	1,078 11 0	900	600
Kurnool	One Station-house at Proddatur.	1,050 0 0	1,000	600
	Repairs	842 8 0	900	600
	One Station-house at Ulsoor (second storey).	..	..	100
	Five huts at Ootacamund	..	..	100
	Three huts at Chittoor	240 0 0	240	100
	One Glass hut at Coonoor	..	..	50
	One Glass hut at Kotagherry.	..	..	50
Madras	One Glass hut at Bangalore	..	..	50
	One Glass hut at Mysore	..	..	50
	One Glass hut at Bellary	..	..	50
	One Glass hut at Hindupore	..	..	50
	One Glass hut at Tumkoor	..	..	50
	One Glass hut at Kolhapur (second visit).	..	..	50
	Repairs	..	..	50
Mangalore	One Glass hut between Calicut and Badagara and Badagara and Tellicherry.	..	..	50
	One Glass hut at Mahadevapatna.	..	..	50
	One Glass hut at Bhimtadka.	..	..	50
	One Glass hut at Kumbla.	..	..	50
	One Glass hut at Kallianpore (second visit).	..	..	50
	Repairs	..	..	50
Masulipatam	One Glass hut between Pallavaram and Tambaram.	702 12 0	1,000	100
	One Glass hut between Chingleput and Tindivanam.	..	..	50
	One Glass hut between Tindivanam and Perumbakam.	..	..	50

* Exclusive of Rs. 700 for Land for Inspector's House, Public Department.

Estimate of 1883-84 of the Cost of Construction and Repairs of Public Buildings through Departmental Agency—continued.

District.	Description of Work.	Actuals 1881-82.	Estimate.	
			1882-83.	1883-84.
1	2	3	4	5
		Rs. A. P.	Rs.	Rs.
Anantapur—contd.	One Glass hut near Cumbakkonam.	..	..	50
	One do. Ootacamund	..	..	50
	One do. Tiptur	..	..	50
	One do. Arkalgud	..	..	50
	One do. Ashtagrama	..	..	61
	One do. Hulsoor	..	..	39
	One do. Kodagalu	..	..	39
	One do. Bantwala	..	..	39
	One do. Kundapoor	..	..	409
	Repairs	..	600	997
Cuddapah	One Station-house at Chellapilly	662 6 7	700	600
	Repairs	..	..	800
	Four huts at Syadapentah	820 0 0	1,000	600
	Three huts at Hanumanconda	1,199 0 0	1,000	1,000
North Arcot	Repairs	..	..	1,000
	One Station-house at Poonamallee.	..	600	600
Chingleput	One Station-house at Vaniyambadi.	529 0 0	650	700
	Repairs	992 0 0	600	328
	Four huts at Mangalore	479 0 0	..	1,000
South Arcot	Repairs	..	..	..
	One Station-house at Thirpapuliyur.	1,406 0 0	3,117	1,000
	One Station-house at Gundakkal.	..	..	1,000
Tanjore	One Station-house at Valavanur.	..	200	250
	Repairs	152 5 8	975	825
	One hut for Inspector at Pattukkottai.	1,400 0 0	..	..
Trichinopoly	Repairs	283 6 6	300	624
	Five huts at Madura (Reserve) at Rs. 250 each.	1,271 0 0	2,000	1,250
Madura	Repairs	920 0 0	1,000	1,000
	New Works	1,324 0 0	..	..
Tinnevelly	Repairs	589 0 0	600	700
	One Station-house at Mallapuram.	999 0 0	730	*984
Salem	Repairs	635 5 0	550	500
	Five huts at Coimbatore By-pass Inner East.	2,660 0 0	980	1,000
Coimbatore	Repairs	475 0 0	500	500
	One hut at Pykara	160 0 0	500	700
Nilgiris	Repairs	..	..	300
	Cabinet Police Hospital (reconstruction).	1,274 8 5	750	920
Malabar	Repairs	..	..	1,500

* Exclusive of Rs. 1,000 for Land for Inspector's House, Public Department.

Extract of 1881-82 of the Cost of Construction and Repairs of Public Buildings through Departmental Agency—*continued*.

District.	Description of Work.	Actuals, 1881-82.	Estimate.	
			1882-83.	1883-84.
1	2	3	4	5
Wynaad	1 New Write Repairs	98 0 0	80	80
South Canara	Five Bungalows at Kadba	1,414 7 3	750	1,000
	Repairs	1,264 8 0	1,000	700
		710 0 0	700	800
	Total	80,813 11 6	32,000	30,000
	Grand Total	47,206 3 1	37,000	34,000

ABSTRACT.

ORDER—dated 11th December 1882, No. 1921, Financial.

The distribution of the sum of Rs. 40,000, in the manner proposed by the Inspector General, is sanctioned.

(True Extract.)

Chief Secretary.

To the Inspector-General of Police.
" Accountant-General.
" Public Works Department.

Govt. of (1882) Madras.

FINANCIAL.

Read

Read Read

G.O., 11th December 1882, No. 1021.

DECEMBER.

Budget Estimates.

Sanctioning the distribution of the sum of Rs. 40,000 granted by the Public Budget for "Fifty Construction and Repairs" for Public Buildings in the Budget proposed by the Inspector-General

Ch Regt

No 1898 C of 24 October 82

Memorandum.

The undersigned has the honor to enquire ~~of the Deputy Engineer Sixth Circle~~ why the work of completing the road from Cumbum to the foot of the Kudalur Ghat, Item No 67 of the Budget of 1882-83, was omitted in the Provincial Budget for 1883-84 submitted to this Office from the Sixth Circle

Ch

24.10.82

333 Rs 1899

S.E. Road Circle
Received 24/10/82.

CO 7/10

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

Read—the following paper :—

From T. WEIR, Esq., Registrar of the High Court of Judicature at Madras, Appellate Side, to the Chief Secretary to Government, dated Madras, 14th December 1882, No. 3024.

I am directed to forward, for the information and orders of Government, a copy of a letter from the District Judge of the Godávari (dated 29th November 1882, No. 591), in which Mr. Kelsall asks permission to vacate, before the end of the year, the building hitherto occupied by the District Court and to occupy a building formerly occupied by the abolished Subordinate Court of Rajahmundry.

2. Mr. Kelsall also asks that Government may be moved to provide funds at once for the construction of a new District Court-house either at Rajahmundry or Cocanada as may hereafter be determined.

3. The dilapidated and insecure state of the Rajahmundry District Court-house has been brought to the notice of Government in several previous communications from this Court (vide letters embodied in G.O., dated 8th February 1876, No. 209, and 24th October 1876, No. 2190).

4. In paragraph 4 of Mr. Kelsall's letter it is stated that an estimate of over Rs. 53,000 was submitted in February 1876 for building a new Court-house at Rajahmundry, but the Order of Government (4th February 1876, No. 582 W.,) does not appear to have been communicated to the High Court.

5. Mr. Kelsall's present letter, read in the light of the previous correspondence on the subject, leaves no room for doubting that the Rajahmundry District Court-house is now in so dangerous a condition that its abandonment is a matter of absolute necessity, and the High Court accordingly proposes, with the concurrence of the Government, to direct the District Judge at once to vacate the present Court-house and to occupy the building formerly used for the Subordinate Court of Rajahmundry. The latter building has, it appears, been occupied permissively by the Sub-Collector since the abolition of the Sub-Court.

6. In paragraph 7 of his letter Mr. Kelsall refers to the question whether the District Court of the Godávari should hereafter be situated at Rajahmundry or at Cocanada, but refrains from expressing any decided opinion in the matter.

7. The High Court will now call upon Mr. Kelsall to draw up a succinct statement of the advantages and disadvantages of the concentration of the Courts at Cocanada and to state his own opinion on the subject. On this point the High Court will again address the Government after the receipt of Mr. Kelsall's report. Meantime I am to urge that Government will be pleased to direct that provision be made by the Public Works Department in the budget for 1883-84 for the erection of a new Court-house at whichever station (Rajahmundry or Cocanada) it may hereafter be resolved to locate it.

Orders—dated 21st December 1882, No. 2202, Judicial.

The action proposed to be taken in paragraph 5 is approved, and will be reported at once to the Revenue Department.

2. This correspondence will be communicated to the Public Works Department with request that, as the matter is represented to be one of pressing urgency, provision should be made in the next budget for the funds sanctioned in G.O., 4th February 1878, No. 542 W., for the erection of a Court-house for the District Judge, Godávari.

(True Extract.)

Chief Secretary.

To the Registrar of the High Court of Judicature at Madras.
" Revenue Department.
" Public Works Department.

Gobt. of Madras

JUDICIAL.

Read

Read

G.O., 31st December 1883, No. 2005.

DECEMBER.

Court-houses.

Approving of the action taken by the High Court in permitting the Godavari District Judge to occupy the present Court-house and to accept the building formerly used for the Deputy-Collector's Sub-Court, and sanctioning that funds may be provided in the Public Works Budget for the erection of a new Court-house.

G. No. 132

Municipal Office,

Dated 8th December 1882.

From A. J. Fitzgerald Esqr

President Municipal Commission,

To The Secretary to Government

Public works Department

Sir,

Attached at Appeal vol 2, No. 249, Fourth despatch

With reference to the Correspondence noted in the margin I have the honor to forward herewith the Budget of Estimate of Charges of this Department for the current year for the Approval of Government

Dated 1883-84

I have the honor &c.

Sd.

Vice-President Municipal Commission

A. J. Arbuthnot

Vice-President Municipal Commission

Read

33

Civil Estimate. Household of His Excellency the Governor from 1st April 1853 to 31st March 1854.

Public Works Grant	Actuals 1851-52	Estimates 1852-53	Estimates 1853-54	Remarks
Furniture charges of Government House at Madras, Guindy Parkand Octacamund	4994 4 5	5,000	5,000	

Government House Octacamund. 1st September 1852.

A. Anstey. Captain R.E. Private Secretary.

337

Civil Estimate Household of His Excellency
the Governor from 1st April 1882 to 31st March 1883.

Public Works Grant	Actuals 1881-82	Estimate 1882-83	Estimate 1883-84	Remarks
Furniture, charges of Government Houses at Madras, Ganady Kurk, and at Octacamund	49944	5000	5000	

Government House
Octacamund
18th September 1882.

A. Awdry. Captain
R.E.
Private Secretary.

1946
338

F. Estimate Civil Services for the year ending 31st March 1884.

IX Miscellaneous.

Details	Estimates	
1881/82	1882/83	1883/84
15058	15058	

1 Repair of Government Roads.
made up as follows, vide order of Government
P.W.Dept. No 2690, dated 5th October 1876.

From Provincial Funds ——— 9058 ✓
— v — Military — do ——— 6000 ✓
Rs 15058 ✓

Municipal Office
Madras 8th September 1882

T.M.C.

President Municipal Commission

340

111 2

Madras Municipality.

From

The Secretary to Govt.
Public Works Department
Chepauk

Dated 8th Feb 82

Subject

Forwards estimate of charges against Govt. portion of Improvement Funds for 1882-83

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

Read—the following papers:—

From the Inspector-General of Police, dated 16th December 1882, No. 6465.

Order—dated 22nd December 1882, No. 5024, Financial.

The Police Lodging Fund opened on the 1st April 1882 with a balance of Rs. 6,127. The receipts for the current year are expected to raise the income to Rs. 29,758. Deducting from this the estimated charges (Rs. 27,000), a balance of Rs. 1,758 will be left at the close of the year.

		Rs.
Balance at beginning of year—		
Actuals	1878-80	13,510
	1880-81	13,367
	1881-82	11,261
	1882-83	6,127
Estimate	1883-84	1,758
Actuals	1878-80	35,709
	1880-81	30,711
	1881-82	28,354
	1882-83	29,758
Estimates	1882-83	24,478
	1883-84	26,478

2. The receipts for 1883-84 including the opening balance are estimated at Rs. 23,758, a sum slightly higher than the estimate for the current year.

3. The Inspector-General budgets for an expenditure equal to the whole of the estimated income, leaving no closing balance. This is not advisable. The estimated charges will accordingly be reduced and fixed at Rs. 23,478 with a closing balance of Rs. 1,000. The expenditure, for which a revised statement will be submitted, will thus stand at Rs. 3,522 and Rs. 4,744, respectively, below the current year's estimate and the actuals for 1881-82.

4. The estimates are passed as follows:—

	Rs.
Receipts	24,478
Charges	26,478

(True Extract.)

Chief Secretary.

To the Inspector-General of Police.
" Public Works Department.
" Accountant-General.

Read W. I. Lewis

Govt. of Lower Burma

FINANCIAL.

Read

Read [illegible] Read

G.O., 23rd December 1886, No. 3024.

DECEMBER.

Budget Estimate

Recurring for [illegible] of the Public Lodging Fund for 1887-88.

INDIAN TELEGRAPH 116333

From Rangoon 23

To Mabein

Dated 23/12/82

Received at Mabein 24/12/82

Mabein Works Asstt Engineer

Your telegram yesterday

Cant spare

Pe upon 1871

Cant till 1st october

Send one reply

Repeat 27 32

Address Repe 40

Cannot attend to matter about

end of January

Put up another Police Station

32

Dated 23 12-82

Despatch Hours

Post Copy of Service Message

From Dowlaishweram To Madras
From Supt Engineer To Madras Works

State deferred

28th Dec: 1882

Your telegram yesterday
. tenuta October 1871 since
reply 492 R.Z. 31st October -
Hope to resubmit estimates
about end of January -

Offg Supt Engr 1st Circle

313

No. 6814 T&N Supt. Engr's office No. 6
Trichinopoly 27th Dec. 82.

Memo.

The Supt. Engineer
No. 6 Circle.

To.

The Chief Engineer
P. W. D.

Sir,

In reply to your memo
No. 7401 C dated 22nd Instant.
I have the honor to report that
the present arrangement with
regard to the Pattukottah
Canal work is that the 10 bridges
which are now under construction
should be completed (this will
be during this official year) and
their maintenance attended to before any
other work is undertaken: this
being the case, no funds for
this work will be required in
1883-84.

2. I think it will be as well
that

Ref is referring about the
made to the Inspector General
of Lands as it is impossible to
say with more to proceed
the arrangements. If leave
were applied for on the basis
with Provincial Surveyor.

I have the honor to be
Sir
Your most obt. Servt

No 2403 Cas/22/12/82 C. to Asst

Memorandum

The Superintending Engineer with Circle is requested to report at once the maximum amount that is likely to be expended in 1883-84 on the new District Jail at Lahore and which can safely be entered in the outgoing Provincial Budget

Cert
22/12/82

SE Ind Circle
dispd 22-12-82

No 1737 T.T

Superintending Engineer's Office
Trichinopoly 27th December 1882

1737

From

The Superintending Engineer
6th Circle

To

The Chief Engineer
P.W.D.

Sir

I have the honour to request that
Government may be moved to
sanction the remarkable for the
under Civil Court Commercial Budget
for the Fasline 1293 with the amount
due to the Revenue Department on account
of 1883/84

I have the honour to be
Sir
Your most obedient Servant

Superintending Engineer 6th

Inward.

The Supdt Engineer
Vellore.

Do.

The Chief Engineer
P. W. D.

No. 1784 T.T.

Dated 27th December 82

Drainage Work

I have the honor to
enclose of the papers
noted in the margin
for the information

[illegible]

INDIAN TELEGRAPH

Madras 27th 1682

To Supdt Engr
Madras
Works - Chepauk
Estimate Triplicane drainage
only delayed for
your visit now
expected. Will reach
you within a week

[illegible]

Supdt

MADRAS 25-12-82

5th CIRCLE.

PUBLIC WORKS DEPARTMENT.

5

Service Message despatched by Telegraph.

From The Superintending Engineer Cotacamund

To Madras Works Chepauk Madras

Estimate Bazaar drainage only delayed for your visit now expected will remark you within a week.

No. 587

Copy forwarded by post for information

Supp. Engineer's Office, 5th Circle, Coimbatore 21 Dec 5 1881

Lt Beatty-Colonel
Lt Major, R. E.,
Supp. Engineer, 5th Circle.

[Rec. Wks. Form No. 111.]

GOVT. OF BOMBAY. } 1882-83 { P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

Madras 2nd December — 1882

Office Note No. 837

To

E.W.

With reference to G.O.No. 3324 W. dated 15th December 1882, I have to forward herewith the statements as per margin for transmission to Government of India in compliance with their Resolution No. 3911 A-G. dated 30th November 1882.

2. The figures for the Irrigation portion of the Statements for 1883-83 and 1883-84 are not available in this Office. They may be obtained from the Chief Engineer's for Irrigation office where the budgets are now under preparation.

C.

Encl. No.

1. Statement showing the percentage which the charges for Establishment bear to Expenditure on Works and Repairs for the year 1881-82.
2. do do 1882-83.
3. do do 1883-84.

[Govt. of India] 1882-83 [Finance]

EXAMINER, P. W. ACCOUNTS.

Madras, 2/5 December 1882

Office Note No. 891.

To Encl 2

W.

In acknowledging the receipt of the Budget Statements I have to request the favor of being furnished at once with any modifications of the figures communicated, and the authority for the alterations, as according to recent orders the Regular Estimate will have to be dealt with as the final grant in the preparation of the Finance Accounts. The sanction of the Government of India will have to be obtained to any reduction of or addition to the Regular Estimate after it had once received the approval of that Government.

2. I herewith forward Part VI and Appendix D. for the Provincial Budget from which the amounts of receipts for the several detailed budgets under preparation may be obtained. It will be observed that the provision for Suspense Accounts

Statement showing the particulars in which the Charges for Establishment have little Relation to the Work in connection with which they are employed from 1901-02 to 03-04

Service	Class						Remarks
Imperial	1901-02 Revised Estimate					38.56	
						20.45	
						27.49	
Provincial						51.57	
Imperial						28.42	
Provincial						43.17	
Imperial						17.69	
Provincial						26.97	

1357

True Copy

A. S. Kinsella
Asst. Chf. Engr. for
Secy. to Govt.

1885.

CHIEF ENGINEER FOR IRRIGATION

Denver January 10th 1885

Office Note. 29.

Circulation Register.

To	From	Dispatch Date.	Receipt Date.
Maj W.	Self	Jan 13.	

Sir I do not know from the data which accompanied the Irrigation Estimate for 1885 and a copy of the Lieutenant Governor's letter of the 31st ult. whether the Irrigation Estimate for the Lieutenant Governor's

Forwarded to Accountant General

K.P.

P.S.D.

14

353

Financial Department

No 1254

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following ~~letter~~

Combined Consolidated Abstract of Receipts and Charges for the Month of March 1882 from the Accountant General dated 30th August 1882

to Sec. Gov.

Combined Consolidated Abstract of Disbursements for the Month of March 1882 from the Accountant General dated 30th August 1882 to Sec. Gov.

Combined Consolidated Abstract of Disbursements for the year 1881-82 from the Accountant General dated 10th January 1883

from the Accountant General dated 10th January 1883

Telegram from the Govt of India Dept of Finance & Commerce dated 17th January 1883

Statement of Revenue and Disbursement for 1881-82 compared with the Estimate for the same period based on Statements from the Accountant General

Orde thereon 23rd January 1931 at 12½

× × ×

Irrigation and Irrigation and
Other Public Works The Public Works
Department submits the requirements
under the former head Rs 6,32,000 and
under the latter head Rs 23,50,000. The
Accountant General was instructed to
adopt these figures provisionally subject
to modification by Government
after framing the Civil Estimates with
reference to the balance in hand, but
as already stated the condition of the
finances is such that the Government
cannot in a position to allot more than
Rs 3,50,000 for Irrigation and Irrigation
and Rs 12,00,000 for the Public Works
purposes.

355

Govt. of India Madras.

Public Works Dept.

Proceedings, dated 23rd Jany 1868

No 131.

Read

No 261 dated 20th Jan

Govt Order

Estimate for

Repairs

No. 261 Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

under date the 23 January 68

Read the following

From the Supdg Engr Sind Circle (No. 249 G dated 4th Octr 1867.)

- - - - Hind - (- 261 Gut upon light -)
- - - - Hind - (- - - of 4' Octr -)
- - - - Hind - (- - - of 21' light -)
- - - - South - (- - 440 of 20' Octr -)
- - - - do - (- - 445 of 2' Octr -)
- - - - light - (- - - of 29' light -)
- - - - Hind - (Chowky &c) - of 20 do -)
- - - - do - (Sangee -) - of 29 do -)
- - - - do - (Ghurbundy -) - of 29 do Octr -)
- - - - do - (Ghurbundy -) - of 26' - -)
- - - - do - (- 277.10 do - of 11' light -)
- - - Ko Sayds the Governor (- 260 - of 29 do - -)
- - - Sind light - (- 1205 of 16' December -)
- - - Sind - (- 1830 of 25' December -)
- - - Sind - (- 2040 do of 11 do - -)
- - - Sind - (- 1791 of 31' - - -)
- - - do - (- 2282 of 5' September -)
- - - Sind - (- 653 of 25' December -)
- - - Hind & Mahi Mangalla (- 2074 of 28' - -)
- - - Hind & Kyfo - (- - of 29' - - -)
- - - Hind & Kyfo - (- - of 27' December -)
Telegram from Kotah Circle (- 604 1/2 of 17' - - -)
Letter from - Kotah - (- 1737 1/2 of 17' - - -)
- - - do - (- - of 25' - - -)
- - - Kotah - (- - of 30' - - -)
Telegram from Superintendent (- 107 - - - -)

Upon the following Works

Civil Building — £ 1,46,791
Communications — 1,10,600
Miscellaneous Expenses — 10,400
Amount of the Expenses of Civil Building Communications — 1,67,791

Civil Building £ 1,16,000
Communications — 39,000
Miscellaneous Expenses — 1,000
— 1,66,000
839.40
4,000
16,282
Electricity
and Steam — 27,500
Expenses

Total Rupees 11,00,000

1 The following work have not as yet been provided with duly sanctioned estimates the Special Attention of the Superintending Engineers Circle is called to the matter & Requisitions

Upon the following Public Works for which Rs 11,00,000 are provided in the Budget for the year 1911-12 the Superintending Engineer Circle is requested to submit the Estimates for the Works mentioned against each for sanction of the Government of India in the P.W. Department

Rs
1. Drainage & Public Works — 11,00,000
2. Irrigation Works — 1,20,000
Total Rupees 12,20,000

These grants have been made to the following Public Works in addition to the grants for Drainage & Irrigation Works. The grant for Drainage & Irrigation Works will be made

[illegible] the Depot
the work in progress

[illegible] Epsly Schools' Colony at Ashtead
- 2. [illegible] Colony at Epsom
[illegible] the water Closet Block at Colney
- 41 School pool Kennel
- 51 Out patients' Surgery and Laboratory
at the General Hospital
- 69 Land from Colonel Ashburnham

4 A provision of £
2000 is made for the
road from Colney
to Noblesth and the
money will be formally
placed at the disposal
of the L.C.C. Council on
a definite undertaking
must at once be obtained
the agency of the body
the transference of the

5 Works are divided into
two classes A and B.
For the former, specific
grants are made, and the
works can be put in hand
if the estimates are sanctioned
by Epsom but can be
executed on days Roads,
only specific appropriation
are hereafter made
6 Early applications
should be submitted for
the funds to meet pressing
charges under temporary
Establishment. Funds
required for completion
and staff work should
also be applied for by
the date last given in Col

6th May

N° 120 of 12 January 1811.

With the annual
Estimate of the Expence of
the Annual Budget
Estimate for 1812/13 to be
transmitted for the information
and guidance of the Officers
of the Department, and for
Copies are furnished for
the information of the
Govt of India

(AE. No 163 Way 22 Jan)

Copy of the Letter
transmitted to the Govt of
India

2 Copies

Expenditure Expence
Expence Estimate
Annual Budget
Estimate
Letter
Annual Budget
Copies
Annual Budget
Copies Annual Budget of Public
Works
Copy Estimate Annual Budget
Copies of any
Estimate with Drawings

3

PUBLIC WORKS