Archives I—10,006—16-8-77.

(1) Number of pages 112

(2) Date of repair 1-4-87

(3) Initials of the Referencer Lavy

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works. DEPARTMENT

G.O. No. / B.P. No.	1940 W	Press. / Mis.
Dated	1-8-1882	19

D.C.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 9.

Read—the following letter from Colonel W. S. TREVOR, R.E., Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 14th July 1882, No. 107 A.—I. :—

I am directed to acknowledge the receipt of your No. 1307 W., dated 25th May 1882, relative to the portion of the establishment charges debitable to the grant for Protective Public Works, and in reply to state that the Government of India is pleased to rule that—

(*a*) In the case of expenditure from Protective Fund on works the usual percentages for Establishments and Tools and Plant may be allowed.

(*b*) In the case of Survey Divisions or other Establishments employed exclusively in the preparation of projects, the actual cost of the Establishments so employed—without any allowance for Accounts or Direction—should be charged.

No. 10.

Order—dated 1st August 1882, No. 1940 W., Public Works.

Recorded.

(True Extract.)

Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Examiner of Public Works Accounts.
" Chief Engineer for Irrigation,
To Superintending Engineers, } with copy of G.O., No. 1306 W., dated 25th May 1882.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated August, 1st.

Recd. *Encl.*

G.O., 1st August 1882, No. 1940 W.

AUGUST.

Nos. 9-10.

Establishment Charges.

Ruling of the Government of India relative to the portion of — debitable to the grant for Protective Public Works, recorded.

1940
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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General Account

No. 129.

READ—the following letter from D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 15th May 1882, No. 26 W.:—

The Government of India, in their letter No. 681 G., dated 5th May 1881, paragraphs 7 and 8, communicated with Public Works G.O., No. 1729 W., dated 14th July 1881, proposed to contribute one-eighth of the estimated cost of the Madras Establishment Charges, *i.e.*, 2½ lakhs, from the General Grant for Protective Public Works.

2. In their letter No. 33 A.I., dated 14th February 1882, printed with G.O., No. 471 W., dated 21st February 1882, a grant of Rs. 60,000 was assigned by the Government of India on account of establishment for preparing projects during 1881-82, and in G.O., No. 451 W., dated 18th February 1882, the distribution of this grant was made by this Government as below:—

	RS.
Contribution to Establishment	23,000
Do. to Works, Buckingham Canal	37,000
	60,000

3. The object of the present reference is with the view that definite orders of the Government of India be obtained—

1*st*.—As to whether the debit to Protective Public Works on account of establishment for the preparation of projects should consist of only the actual cost of the Project Divisions;

2*ndly*.—Whether, in addition to the actual cost of the divisions, a certain percentage (say one-eighth) on account of charges for direction and account should also be debited to the Protective Works Grant; or

3*rdly*.—Whether the entire cost of the Project Divisions, including outlay on Works, Tools and Plant, &c., should in the first instance be debited to Provincial, and an adjustment made in the supplementary accounts of this office against "Protective Public Works" by debit to Imperial to the extent of one-eighth of the entire Provincial Establishment Outlay, including charges for direct[illegible] and account, or to the extent of the total amount sanctioned b[illegible]ment of India for the year under Establishment for Prote[illegible]tive Works irrespective of outlay.

4. The favor of early orders is solicited.

No. 130.

Order—dated 25th May 1882, No. 1306 W., Public Works.

Ordered to be forwarded for the early orders of the Government of India.

(True Extract.)

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

To the Examiner of Public Works Accounts.

No. 131.

Endorsement—dated 25th May 1882, No. 1307 W., Public Works.

Copy forwarded to the Government of India.

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

Exd. A. F. Goodall.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated May, 25th.

Recd. *Encl.*

25th May 1882, No. 1307 W.

MAY.
Nos. 129—131.

Protective Public Works.

DEBITING portion of Establishment Charges to the grant for —.

9H0
4

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

PUBLIC WORKS DEPARTMENT.

BUDGET-ESTIMATE

OF

BUCKINGHAM CANAL

OF THE

GOVERNMENT OF MADRAS

FOR THE YEAR

1880-81.

CHEPAUK,
19th March 1880.

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

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE BUCKINGHAM CANAL, REVENUE, FOR THE YEAR 1880-81.

BUDGET-ESTIMATE OF THE REVENUE THAT WILL BE DERIVED BY, AND ON ACCOUNT OF, THE BUCKINGHAM CANAL FOR THE YEAR FROM 1ST APRIL 1880 TO 31ST MARCH 1881.

	Budget-Estimate, 1880-81.	Budget-Estimate, 1879-80.	Regular Estimate, 1879-80.
	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.			
Buckingham Canal.			
Realised in the Public Works Department	1,24,000	87,294	87,294

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF EXPENDITURE ON THE BUCKINGHAM CANAL FOR THE YEAR 1880-81.

ABSTRACT OF THE ESTIMATED EXPENDITURE ON THE BUCKINGHAM CANAL FOR THE YEAR FROM 1ST APRIL 1880 TO 31ST MARCH 1881.

	Budget-Estimate, 1880-81.	Budget-Estimate, 1879-80.	Regular Estimate, 1879-80.
IRRIGATION AND NAVIGATION WORKS.	Rs.	Rs.	Rs.
Buckingham Canal.			
Repairs.			
Communications	64,550	64,050	64,050
Establishment	37,748	23,945	23,945
Tools and Plant	400	...	...
	*1,02,698	87,995	87,995

*Excludes Rs. 1,20,000 provided from Provincial Funds under Original Works in the Provincial Budget for 1880-81.

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GOVERNMENT OF MADRAS.

PART I—Nil.

PART II.

DETAIL OF THE BUDGET-ESTIMATE OF REPAIRS TO THE BUCKINGHAM CANAL FOR THE YEAR 1880-81.

Heads of Classification.	Division.	Locality.	Items.	Estimate, 1880-81. Amount.	Estimate, 1880-81. Total.	Estimate, 1879-80. Amount.	Estimate, 1879-80. Total.
		IRRIGATION AND NAVIGATION WORKS.		Rs.	Rs.	Rs.	Rs.
		Buckingham Canal.					
Navigable Canals.	Buckingham Canal.	Between Madras and Pulicat Lake.	Maintenance of the Buckingham Canal from Cooum river at Madras to Pulicat, 26¾ miles, at Rs. 220 per mile.	5,880			
		Between Adayar and Mercanum.	Do. from Adayar near Madras to Mercanum in South Arcot, 61 miles, at Rs. 220 per mile.	13,420			
		Between Pulicat and Pennér.	Do. from Pulicat to Pennér, 92 miles, at Rs. 250 per mile.	23,000			
		Between Pennér and Commamur Canal.	Do. from Pennér to tail of Commamur Canal, 83 miles, at Rs. 250 per mile.	20,750			
		Madras ...	Do. of the junction section of the Buckingham Canal, 5 miles, at Rs. 200 per mile.	1,000			
			Grant for Minor Repairs ...	500			
			Total ...	...	64,550	...	64,050

1940
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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

19th March 1880, No. 715 W.

General.
Account.

Read the following papers :—

No. 85. From the Superintending Engineer, Third Circle, dated 29th October 1879, No. 6,274.

No. 85-A. From the Accountant-General, Madras, dated 3rd February 1880, No. 374.

No. 85-B. From Major A. FILGATE, R.E., Officiating Deputy Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, Irrigation Branch, dated Fort William, 3rd March 1880, No. 34 A.—I.

With reference to your telegram of the 4th ultimo, furnishing the figures appertaining to the Buckingham Canal, for the Regular and Budget Estimates for 1879-80 and 1880-81 respectively, I am directed to state that the amounts noted in the margin have been accepted by the Government of India, and should accordingly be included in the Final Issue of the Budget Estimate for 1880-81 for "Irrigation and Navigation Works" under the head *Provincial*.

Regular Estimates, 1879-80.	Rs.
Receipts	87,294
Charges	87,294
Budget Estimate, 1880-81.	
Receipts	1,24,000
Charges	1,03,399

I am at the same time to point out, that it appears from a communication from the Accountant-General, Madras, to the Government of India in the Finance Department, that the amounts marginally noted have been accepted by him, and as there are some differences between these figures and those furnished in the telegram referred to above, I am to request that the differences may be reconciled, and the correct amounts communicated to the Provincial Accountant-General.

Regular Estimate, 1879-80.	Rs.
Receipts	87,294
Charges	87,995
Budget Estimate, 1880-81.	
Receipts	1,24,000
Charges	1,02,698

No. 86. Order thereon, 19th March 1880, No. 714 W.

Ordered that the Budget Estimate of the receipts and charges of the Buckingham Canal be printed and circulated to the officers concerned.

2. The Government of India will be informed that in the figures reported in the telegram dated 4th February 1880 the sum of Rs. 701 was by mistake added to the charges for 1880-81, instead of to the charges for 1879-80, hence the difference between the figures of the telegram and those reported by the Accountant-General. The budget has been rectified accordingly.

(True Extract.)

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

To the Superintendent of Works, Buckingham Canal.
" Examiner of Public Works Accounts.
" Revenue Board.
" Revenue Department.
" Financial Department.
" Accountant-General.
" Superintending Engineer, Third Circle.

No. 87. (DOCKET No. 715 W., dated 19th March 1880.)

FORWARDED to the Government of India.

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

Exd. S. T. Austin.
Spare Copies

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GENERAL ACCOUNT.

Govt. of 1880 Madras

PUBLIC WORKS.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA

Dated March 1880.

Rect.

Date

Read

No. 12, 10th May 1880, No. 1,120 W.

MARCH.

Nos. 85-87.

1440
9

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

10th May 1880, No. 1,120 W.

General Account.

Read the following paper :—

No. 11. From the Officiating Under Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, Irrigation Branch, dated Simla, 22nd April 1880, No. 70-AI.

I AM directed to acknowledge the receipt of the final issue of the budget estimate of the Buckingham Canal for 1880-81, forwarded under cover of your docket No. 715 W of the 19th March last, and in reply to state that in future a separate budget estimate for the Buckingham Canal is not required, and that the amount thereof should be included in the budget estimate for "Irrigation and Navigation Works" under the head *Provincial*.

No. 12. ORDER THEREON, 10th May 1880, No. 1,120 W.

ORDERED to be recorded.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintendent of Works, Buckingham Canal.
" Examiner of Public Works Accounts.
" Revenue Board.
" Revenue Department.
" Financial do.
" Accountant-General.
" Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation.

Exd. E. C. Shunker.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of [1880] Madras

PUBLIC WORKS.

To

THE SUPERINTENDENT OF WORKS,
BUCKINGHAM CANAL.

&c., &c., &c.

Dated May, 10th.

Issued

Recd. *Encl.*

G. O., 10th May 1880, No. 1,120 W.

MAY.

Nos. 11-12.

Budget Estimate of the Buckingham Canal for 1880-81.—Letter from Government of India acknowledging the receipt of the — and stating that in future the amount of the estimate should be included in the budget estimate for "Irrigation and Navigation Works" under Provincial.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

1st October 1880, No. 2,278 W.

General.
Account.

Read the following papers :—

No. 5. Circular from the Government of India in the Public Works Department (Account—General), dated Fort William, 7th January 1880, No. II.

Outlay on Productive Public Works.

Read again—

Despatch from the Secretary of State, No. 310 A (Financial), dated 27th September 1877.
Despatch from the Finance and Commerce, to the Secretary of State, No. 116 F, dated 18th March 1878.

Read also—

Public Works Department letter Nos. 409—20 A.—G., dated 9th September 1879.
" " " Resolution, Nos. 825—37 A.—G., dated 17th December 1878.
And the following Resolution, No. 1,856, dated 10th December 1879, by the Government of India, Department of Finance and Commerce.

Read again the following Resolutions :—

I.—No. 2,009, dated 22nd March 1878, paragraphs 5 and 7, as follows :—

"5. A Provincial Government may find funds to be expended on Productive Public Works—

"(*a*) by grants from its accruing Provincial revenues or from any balance of such revenue at its disposal;

"(*b*) by negotiating, with the sanction of the Government of India, local debenture loans; or

"(*c*) by obtaining grants from the Imperial Treasury.

"7. From whatever source the funds are supplied, the whole expenditure upon Productive Public Works must be charged to the Capital Account of the work concerned."

II.—No. 3,667, dated 26th October 1878, paragraphs 14 and 25, as follows :—

"14. When, under the option allowed to it in paragraph 5 of Resolution No. 2,009, dated 23rd March 1878, a Provincial Government expends provincial resources on Productive Public Works, such expenditure will be recorded in *Account No. II* above the Total Expenditure, and will operate to reduce the Provincial Surplus, or increase the Provincial Deficit. But, in the *General Account No. IV*, any such provincial expenditure upon Productive Public Works will be combined with the Imperial expenditure under the head of *Productive Public Works* below the Total Expenditure. It is not overlooked that the effect of this arrangement will be, in such cases, to make the remaining Imperial surplus more, or the Imperial Deficit

less, than it would otherwise be, and that this result is open to some objection. But the amounts are never likely to be large; and it seems better to submit to that inconvenience than to break up the head of '*Productive Public Works*,' and show the provincial part of the expenditure on such works above the surplus or deficit of the year.

"25. In the Public Works Accounts cognisance will not, in future, be taken of transactions between Provincial and Local Funds, or contributions from the Imperial Treasury to either Provincial or Local Funds or *vice versâ*; all such contributions will be arranged by the Financial Department of the local Government through the General Civil Accounts; the duty of the Public Works Account Department will be confined to seeing that the expenditure on Public Works from any particular grant from whatever source does not exceed the amount of the grant. Every grant by the local Government for Public Works must be made either wholly from Provincial Funds, or wholly from some specified Local Fund, any necessary mutual contributions between these funds on account of the work being arranged in the Civil Accounts."

III.—No. 2 819, dated 17th September 1879, recording certain decisions upon the subject of subsidiary works.

Read letters from the Accountant-General in the Public Works Department:—

IV.—No. 327 G, dated 28th June 1878, suggesting the issue of positive and specific orders prohibiting the expenditure of Provincial funds upon works subsidiary to any Productive Public Works, which are essential parts of such a work.

V.—No. 480 G, dated 4th September 1879, inquiring whether—

(1) the whole capital cost of Productive Public Works, however provided, should be treated as provincial expenditure, and so transferred from the books of the Public Works Department to the Civil Department;

(2) or whether only the portion provided from provincial resources should be so treated.

RESOLUTION.—The whole capital cost from all sources of every work sanctioned as a Productive Public Work should be recorded in the accounts of the Public Works Department, and in the Finance and Revenue Accounts as *Imperial Expenditure*, no part of such expenditure being recorded as Provincial expenditure or entered in the Provincial accounts, either because funds may be raised for it by means of a local debenture loan, or provided from provincial resources, or because interest on the capital cost of the work, and the cost of its maintenance, are defrayed from provincial resources, and the revenues accrue to the Provincial Treasury.

2. It is sometimes made a condition of the construction of a Productive Public Work that the whole or part of the cost shall be raised by means of a local debenture loan. The interest upon such a loan is paid from provincial resources and entered in the provincial column in the Finance and Revenue Accounts. Nevertheless a local debenture loan is part of the regular public debt of India: in raising such a loan a local Government acts not independently, but only as the agent for the Government of India; and the particular character of those loans confers upon the local Governments no special rights in their proceeds which simply accrue to the Imperial Treasury and are Imperial assets.

3. In like manner the only practical effect of an appropriation from the balances at the credit of a local Government for the construction of a Productive Public Work is to diminish the interest which the local Government would otherwise pay in respect to the work. Funds thus provided from provincial resources are simply contributions to the Imperial expenditure on Productive Public Works, and should be treated accordingly in the accounts, the entries under 39, *Productive Public Works*, being unaffected thereby, and, as already said, the whole capital cost of the work being none the less treated as Imperial.

4. It follows that local Governments may not spend provincial funds, directly, upon the construction of works subsidiary to any Productive Public Work, the cost of which must be treated as part of the cost of the main Productive Work. If a local Government desires to spend provincial funds upon such works, it can only do so, indirectly, by contributing them to the Imperial Government, as explained in paragraph 3.

5. The Government of India is responsible to the Secretary of State that the general conditions applicable to the construction of such works, and the special conditions (if any) upon which the Secretary of State has sanctioned any particular work, are carefully observed. This responsibility is incompatible with any independent action upon such works by a local Government, notwithstanding that it may find the cost from provincial funds. The Secretary of State takes no count of the several sources from which the funds for the construction of such a work are provided; he regards only the gross cost of the work, and the conditions applicable to its construction which are in no way affected by the origin of the funds expended upon it.

6. Therefore, all expenditure upon the construction of a Productive Public Work or any work subsidiary thereto, which is an essential part thereof, must be recorded as Imperial expenditure; and no such expenditure must be incurred, except with the sanction of the Governor-General in Council in the Public Works Department.

7. These orders are not intended to interfere with the expenditure of ordinary provincial resources upon works which, though connected with a Productive Public Work, are not essential parts thereof and do not enter into its cost, such, for example, as a bridge over a canal or railway, a feeder-road, or even a feeder-canal, or the like; but in the execution of such works care must be taken not to transgress the general principles laid down in this resolution.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department, General, Irrigation, and Railway Branches.
The Chief Commissioners, Central Provinces, British Burmah, Coorg, and Assam.
The Resident at Hyderabad.
The Agents to the Governor-General for Central India and Rajputana.
The Superintendent of Port Blair, and Chief Commissioner, Andaman and Nicobar Islands.
The Director-General of Telegraphs.
The Inspector-General of Military Works.
The Agent, Governor-General, Biluchistan.
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.

ORDER.—Ordered that this Resolution be communicated to the local Governments and Administrations and Officers noted in the margin for information and guidance.

Ordered, also, that a copy be forwarded to the Foreign Department for communication to the Chief Commissioner, Mysore.

(Signed) A. FRASER, Major-General, R.E.,
Secretary to the Govt. of India.

To the Secretary to the Government of Madras, Public Works Department.

No. 5-A. From E. C. MELLISS, Esq., Officiating Under Secretary to the Government of India, Public Works Department (Account—Irrigation), to the Joint Secretary to the Government of Madras, Public Works Department, Irrigation Branch, dated Simla, 25th August 1880, No. 148 A.I.

THE Accountant-General, Public Works Department, has brought to the notice of the Government of India the fact of the exclusion from the budget and regular estimates for 1879-80 for ordinary "Irrigation and Navigation" Works of the outlay on construction of the Buckingham Canal.

2. As it is necessary that all transactions of the canal under Capital and Revenue should be included in one budget estimate, I am directed to inquire whether any provision has been made for construction outlay in the budget estimate for the current year for "Other Public Works" Provincial, and if so to request that the grant for the same may be transferred to the head "33, Irrigation and Navigation."

No. 5-B. From the Officiating Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 23rd August 1880, No. 91 W.

WITH reference to G.O., No. 1,120 W., dated the 10th May 1880, I have the honor to report, for the information of Government, that, under instructions received from the Accountant-General, Public Works Department, the outlay on the Buckingham Canal is now being charged entirely to the head Irrigation and Navigation under Provincial.

2. In order to meet this outlay to its full extent, it would seem necessary that early steps should be taken to transfer to the new head the grant sanctioned for the work in the Provincial Budget, as well as subsequent sanctions from the Provincial Reserve with Government.

No. 5-C. Office Note by the Examiner of Public Works Accounts, dated 19th September 1880, No. 556.

No. 6. ORDER THEREON, 1st October 1880, No. 2,278 W.

COMMUNICATED to the Examiner of Public Works Accounts with the remark that the Circular is not, in the opinion of His Grace the Governor in Council, applicable to the Buckingham Canal, regarding which the Government of India will be addressed.

(Here enter No. 2,279 W., dated 1st October 1880.)

(True Extract.)

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

To the Examiner of Public Works Accounts.
" Superintendent of Works, Godávari.
" do. do. Kistna.
" do. do. Buckingham Canal.
" Chief Engineer for Irrigation.

Exd. E. C. Shunker.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1880} Madras.

PUBLIC WORKS.

To

THE EXAMINER OF PUBLIC WORKS
ACCOUNTS.

&c., &c., &c.

Dated October, 1880.

Issued

Recd. Encl.

G. O., 1st October 1880, No. 2,278 W.

OCTOBER.

Nos. 5-6.

Buckingham Canal.—Papers on the subject of the — being classed as a Productive Public Work, communicated to the Examiner of Public Works Accounts.

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PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 2,279 W.

No. 7.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—With reference to Public Works Circular No. II of 7th January 1880, and subsequent letter from the Accountant-General, Public Works Department, to the address of the Examiner, No. 91 I., dated 25th May 1880, intimating the decision of the Government of India to class the transactions of the Buckingham Canal under the head "Irrigation and Navigation," I am desired to request that this decision may be reconsidered as, in the opinion of His Grace the Governor in Council, this classification would not be appropriate to the work in question; and further that the work may be exempted from the operation of the first-quoted circular, as not being in the accepted sense a Productive Public Work.

2. Though carried out as a famine work from Imperial funds, the expenditure on it, before and since the termination of the famine, has been entirely met from "Provincial," on which footing it is desired by this Government that it should in future remain.

3. His Grace in Council considers that, as forming a most important line of communication between Madras and the great Irrigation works (Godávari and Kistna) to the north, and Mercanum on the south (from which eventually it will reach Pondicherry), it is precisely of the same character as a main local trunk road, which would under no circumstances be classed as a Productive Work; indeed the canal is simply a more economical and in every way more suitable description of communication than any road could be in this particular locality, necessary alike for administrative purposes and for the proper development of the trade along the coast.

4. The tolls which are levied and credited to a special fund under Madras Act I of 1870 are in every way analogous to those on ghât roads, and though susceptible possibly of increase cannot be looked on as intended mainly to pay a specific centage on the outlay, or constitute this in the ordinary sense a "Productive Public Work."

5. The classification moreover of the work under "Irrigation and Navigation" appears to be equally inappropriate. This class, it is believed, avowedly relates to works which form portion of combined systems in connection with either deltas or other works dependent on river supplies, but not to canals which being purely tidal and intended only for navigation are merely highways, the constructive features of which are governed by considerations that place them in a class differing widely from those applicable to the others.

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 October 1880.
Exd. E. C. Shunker.
Spare Copies

GENERAL ACCOUNT.

Govt. of [1880] Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA

Dated October, 1st

Issued

Read. Encl.

O. O. 1st October 1880, No. 2,279 W.

OCTOBER.

No. 7.

Addressing on the subject of the Buckingham Canal being classed as a Productive Public Work.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

3rd December 1880, No. 2,782 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 19. From A. B. SAMPSON, Esq., Under Secretary to the Government of India, Public Works Department, (Civil Works—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, Irrigation Branch, dated Simla, 15th November 1880, No. 356 I.

In reply to your letter No. 2,279 W., of the 1st October last, regarding the classification of the Buckingham Canal, I am directed to say that, as the canal is clearly a work of navigation, it must be dealt with under the head "Irrigation and Navigation." It was never contemplated to class the project as a Productive Public Work, but all works for navigation only not so classed must find a place under the head "Irrigation and Navigation."

No. 20. ORDER THEREON, 3rd December 1880, No. 2,782 W.

COMMUNICATED to the Superintendent of Works, Buckingham Canal, and to the Examiner, Public Works Accounts.

(True Extract.)

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

To the Superintendent of Works, Buckingham Canal.
" Examiner of Public Works Accounts.
" Chief Engineer for Irrigation.
" Board of Revenue.

Exd. S. T. Austin.

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1880] Madras.

PUBLIC WORKS.

To

THE SUPERINTENDENT OF WORKS,
BUCKINGHAM CANAL,
&c., &c., &c.

Dated December, 3rd.

Issued

Read. *Encl.*

G. O. 3rd, December 1880, No. 2,782 W.

DECEMBER.
Nos. 19-20.

Buckingham Canal.—Letter from the Government of India stating that as the —, is clearly a work of navigation it must be dealt with under the head "Irrigation and Navigation," communicated to the Superintendent of Works, Buckingham Canal.

5

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

28th December 1880, No. 2,952 W.

General.
Account.

Read the following paper:—

No. 102. From Major D. H. TRAIL, R.E., Officiating Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 22nd December 1880, No. 172 W.

WITH reference to G.O., No. 2,782 W., of the 3rd instant, I have the honor to invite the attention of Government to paragraph 2 of my letter, No. 91 W., of the 23rd August 1880, and to request that the transfer of grant therein alluded to may be effected at an early date.

2. The provision for the Buckingham Canal in the ensuing year should, according to the classification pointed out by the Government of India, be made in the Irrigation Budget.

No. 103. ORDER THEREON, 28th December 1880, No. 2,952 W.

THE Examiner, Public Works Accounts, will be informed that the Government see no necessity to include the Buckingham Canal in the Irrigation Budget. The work will be entered in the Provincial Budget under a distinct head "Irrigation and Navigation."

(True Extract.)

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

To the Examiner of Public Works Accounts.
" Superintendent of Works, Buckingham Canal.
" Chief Engineer for Irrigation.

Exd. E. C. Shunker.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of [1880] Madras.

PUBLIC WORKS.

To

THE EXAMINER OF PUBLIC WORKS ACCOUNTS,

&c., &c., &c.

Dated December, 28th.

Issued

Recd. *Encl.*

G. O., 28th December 1880, No. 2,952 W.

DECEMBER.

Nos. 102-103.

The Buckingham Canal not to be included in the Irrigation Budget, but the work entered in the Provincial Budget under a distinct head "Irrigation and Navigation."

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

1st February 1881, No. 280 W.

General.
Account.

Read the following paper:—

No. 4. From Major D. H. TRAIL, R.E., Officiating Examiner, Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 20th January 1881, No. 184 W.

I HAVE the honor to acknowledge the receipt of G.O., No. 2,952 W., dated the 28th December 1880, and to state, with reference thereto, that in accordance with the instructions contained in the Proceedings of the Government of India, communicated with G.O., No. 1,120 W., dated the 10th May 1880, I have provided for the Buckingham Canal in the Irrigation and Navigation Budget Estimates submitted by this Office to the Accountant-General, Public Works Department.

2. These instructions, which are further confirmed in the Proceedings of the Government of India communicated with G.O., No. 2,278 W., dated the 1st October 1880, appear to point out clearly that the work should be thus provided for; and to show how the outlay thereon is accounted for, I beg to forward the accompanying two forms of accounts current provided by the Government of India for use in this Office, from which it will be observed that the Buildings and Roads Account Current does not provide for Irrigation and Navigation Works, while Provincial Works are provided for in the Irrigation and Navigation Account Current, in which, according to instructions received from the Accountant-General, Public Works Department, the transactions of the Buckingham Canal have hitherto been recorded.

3. It may not appear a matter of much concern as to what budget should contain the grant for the canal, provided it is entered under the head "Irrigation and Navigation;" but it is incumbent on my part to point out to Government that since the charge is recorded in the Irrigation and Navigation Accounts, it is necessary, in an account point of view, that the grant should be sanctioned in the Irrigation and Navigation Budget as desired by the Government of India, and should the Government disagree with me in this view, further instructions from the Accountant-General, Public Works Department, on the matter will be necessary.

No. 5. ORDER THEREON, 1st February 1881, No. 280 W.

ORDERED that the following letter be sent.

(Here enter No. 280-A W., dated 1st February 1881.)

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

Exd. S. T. Austin.
Spare Copies

GENERAL ACCOUNT.

Govt. of (1881) Madras

PUBLIC WORKS.

To

Dated February, 1st.

Issued

Read. Encl.

G. O., 1st February 1881. No. 280 W.

FEBRUARY.

Nos. 4-5.

Classification of the Buckingham Canal.—Ordered that the Government of India be addressed on the subject of the ——.

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PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 280-A W.

No. 5-A.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—With reference to your letter No. 2,782 W. of 3rd December 1880, I am directed to point out that in the rules for the classification of works lately embodied in the Madras Public Works Code, and taken directly from Government of India Circular No. 74 of 1876, provision is made under Service Head iii., Communications, for a distinct sub-head 7, Navigable Canal.

2. There appears no reason why the Buckingham Canal should not be classed under this sub-head; indeed, if it may not be there would seem to be no object in maintaining the classification at all, since it is inconceivable that any other work should come under it.

3. The canal in question is purely and simply a work of communication; it has no connection whatever with irrigation, and its control is not vested in the Chief Engineer for Irrigation. Its charges are debited and receipts credited to Provincial Funds, and its inclusion under the head of "Irrigation and Navigation" would only cause confusion and render untrustworthy the accounts of irrigation works.

4. For these reasons I am to request that the Government of India will reconsider their determination that the work shall be classed under Irrigation, and permit its inclusion, under the sub-head to which it obviously belongs, in the scheme of classification sanctioned by the Government of India.

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 1881.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of [1880] Madras

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated February. 1*st.*

Issued

Recd. *Encl.*

G. O., 1st February, 1881, *No.* 280-A W.

FEBRUARY.
No. 5-A.

On the subject of the classification of the Buckingham Canal.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

28th March 1881, No. 837 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 80. From Major-General J. CROFTON, R.E., Deputy Secretary to the Government of India, Public Works Department, (Civil Works—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, dated Fort William, 14th March 1881, No. 126 I.

I AM directed to acknowledge the receipt of your letter No. 280-A W., dated 1st ultimo, urging the classification of the Buckingham Canal under "Communications" instead of under "Irrigation and Navigation," and to communicate, in reply, the regret of the Government of India that the request cannot be complied with. I am to explain that the classification which was in force in 1876 has been modified by the revised financial classification introduced under the orders of the Secretary of State in September 1879. Under this classification, as was shown in Circular No. V, dated the 15th January 1880, works of Navigation and certain classes of Railways which were formerly included under Communications must be shown under "Irrigation and Navigation" and "Railways" respectively. The ruling is clear and leaves no room for doubt or exception.

2. The budget head under which the Buckingham Canal has now to be entered is not, I am to remark, "Irrigation," but "Irrigation and Navigation." That some of the outlay under that head should be Imperial, and some Provincial, need not cause any confusion or difficulty. The arrangements for the chief control of the works are entirely at the discretion and convenience of the Government of Madras.

No. 81. ORDER THEREON, 28th March 1881, No. 837 W.

ORDERED to be recorded.

(True Extract.)

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

To the Examiner of Public Works Accounts.
" Chief Engineer for Irrigation.
" Superintendent of Works, Buckingham Canal.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1881} Madras.

PUBLIC WORKS

To

THE EXAMINER OF PUBLIC WORKS ACCOUNTS,

&c., &c., &c.

Dated March, 28th.

Issued

Read.

Endd.

G. O., 28th March 1881, No. 837 W

MARCH.

Nos. 80-81.

Buckingham Canal.—Letter from the Government of India intimating that the — should be classified as "Irrigation and Navigation," recorded.

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APPENDIX A.

Distribution Statement of Reorganized Department Public Works, Madras.

Superintending Engineers' Circles.	Executive Divisions.	Sub-Divisions.	Establishment. Executive Engineers.	Assistant Engineers.	Upper Subordinates.
No. I	1. Ganjam	2	1	1	4
	2. Vizagapatam	2	1	1	4
	3. Eastern Godávari	3	1	2	7
	4. Western do.	2	1	3	7
	5. (A) Project Division	...	1	2	3
No. II	6. Eastern Kistna	3	1	3	6
	7. Western do.	2	1	2	7
	8. Nellore	2	1	1	7
	9. Sungum Project	2	1	2	6
No. III	10. Bellary	2	1	...	4
	11. Cuddapah	2	1	1	6
	12. Kurnool	1	1	1	4
	13. Madras Irrigation and Canal Company's Canal	2	1	2	6
	14. (C) Project Division	...	1	2	3
No. IV	15. West Coast	3	1	2	12
	16. Coimbatore	2	1	1	5
	17. Salem	...	1	...	5
	18. North Arcot	2	1	2	5
	19. (B) Project Division	...	1	1	4
No. V	20. South Arcot	1	1	1	5
	21. Chingleput	2	1	1	6
	22. Buckingham Canal	3	1	1	4
	23. Presidency and Bangalore	2	1	2	7
No. VI	24. Trichinopoly	2	1	1	8
	25. Tanjore	2	1	2	8
	26. Negapatam	2	1	2	7
	27. Madura	2	1	1	8
	28. Tinnevelly	2	1	2	7
Supt. of Works.	29. Consulting Architect	...	1	...	2
Chief Engr. for Irrigation.	30. (D) Project Division	...	1	...	...
	Secretariat	...	1	1	...
	Guaranteed Railways	...	2	...	* ...
	Supernumeraries	...	3	4	18
	Totals	50	36	47	185

* Includes two for Workshops.

APPENDIX D.

Protective Works Projects now in hand or proposed, para 8 Government of India Letter, No. 681 G, dated 5th May, 1881.

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	1883-84.
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
(*a.*) Ganjam, Gopaulpore, tidal Canal.	A Project Division 1st Circle.	During the last famine a tidal canal 9 miles in length, was completed from Ramba at south end of the Chilka Lake to Ganjam, thus with the system of Canals to the North connecting the latter place with Cuttack, Midnapur ,&c. It is now absolutely essential that this Canal should be extended southwards about 12 miles to the port ofGopaulpore, the most important emporium of the district, thus securing the means of distributing food grains in case of famine and of creating for ordinary seasons a highly promissing artery of trade. A detailed estimate for a high level fresh water canal, amounting to Rs.1,72,000 was framed some years since, but late information appearing to show that a tidal canal will be preferable, arrangements are being made for completing the estimate, which should be ready for submission in six or eight months.	2·10	Nil.	Nil.	1·00
(*b.*) Road from Salur in the Vizagapatam Division, *via Potinghy Ghaut* to Koraputt and Jugdulpore in Bustar.	Do.	The primary link in this, the first cart road leading from the littoral of Vizagapatam to, and through the country above the ghauts in Jeypore and Bustar, as yet attempted to be made, is the "Potinghy Ghaut," on which such small sums (altogether inadequate however for securing proper progress) have hitherto been spent from Provincial funds as could be spared. While grain has been at famine prices in the low country, it has always been cheap above the ghauts, where the rainfall seems to be abundant and certain, and where land is apparently to be obtained for emigrants, the country being but sparsely populated. Of the revised estimate amounting to 3·40 Lakhs for the Potinghy Ghaut now under examination (which will, if necessary, be forwarded to the Government of India) about one-third has already been spent, and it is thought that probably nine lakhs more would be needed to take the line 70 miles on to Jugdulpore (new Bustar). No estimate has been framed for this latter portion, but with the new establishment, one should be ready a year hence in time for entry in the Budget of 1883-84.	10·50	0·75	1·00	2·00
(*c.*) Buckingham Canal.	At present Buckingham Canal Division. 1st Circle.	N. B.—Other roads suitable for cart traffic, *e.g.*, for linking Koraputt with Raigurh and others leading towards Sumbalpore north-east and through Kalahandy north-west will be certainly required in course of time as protective works, but need not be further adverted to here. From the early part of the century, a tidal canal connecting the backwaters of the east coast north of Madras was considered feasible and partially carried out. The scheme was more fully developed in the late famine by so far completing the works as to				

Protective Works Projects now in hand or proposed, para 8, Government of India Letter, No. 681G, dated 5th May, 1881.
—(*Continued*)

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	18838-4.
			Lakhs	*Lakhs*	*Lakhs*	*Lakhs*
(*d.*) Buckingham Canal South of Markanum.		make a tidal communication now known as the "Buckingham Canal," extending nearly 200 miles north, and about 50 South of Madras. The total outlay from the commencement to date has been nearly 37·4 lakhs, of which 27·1 lakhs may be considered normal. The completion estimates now far advanced amount to about 29 lakhs, so that the normal outlay will, for the finished work be approximately, 56 lakhs. For the distribution of food grain during famine a safe interior line of coastal communication will be invaluable, while for ordinary trade purposes, its importance is daily on the increase. Already boats from Coconada come laden to Madras 400 miles, and it can hardly be doubted that eventually the whole line of coast will be similarly connected. A work of this character is wholly beyond the unaided Provincial resources, and as it is essentially "Protective" in its character, it is here included. The estimates should be ready for submission six months hence.	56·00	* Nil.	5·00	5·00
(*e.*) Baroor Tank.	B Project Division. 2nd Circle.	The extension southward of the above canal through the French territory (18 miles) and as far as Point Calimere has been regarded not merely as desirable for completing a much needed link in the coast communications, but as holding in readiness a work which is considered to be extremely well suited for execution during famine. The details of a considerable portion of the estimate were worked out some years ago, but its entire revision will be needed to allow of its being sanctioned by the Government of India. At the present moment, however, there is no very pressing necessity for the work, the time named for its submission may be for the Budget of 1884-85. ... ... This work was commenced for Relief in last Famine. The project provides for an anicut across the Pooniar river, supply channel to Sarur Taluq, enlargement of the tank irrigation channels and head sluices to existing channels. The increase of cultivation is expected to be 5,610 acres, and of revenue, 22,137 rupees. The work is considered valuable as a famine protective work. Plans and estimates have been prepared and submitted to the Government of India, but were returned for revision. They will probably be resubmitted by the end of official year.	30·00	Nil.	Nil.	Nil.
(*f.*) Marandahully.	Do.	Work was commenced for Famine Relief. The project provides for an anicut across Sumadakumara river, supply channel to Sungambasavan tank enlarging this and Jairy Talab, and channels from tanks. Provides for the storage of 667 millions of cubic feet of water. Increase of cultivation and revenue expected not	3·10	Nil.	1·00	2·00
		yet known. It is understood that estimates are nearly ready for submission.				
(*g.*) Vaniar.	Do.	This work is likely to be of value as a protective work. ... ... Work was commenced for Famine Relief, but probably the project cannot be carried out so as to utilize all the work then done. The project provides for the formation of a reservoir by damming the valley of the Vaniar river. Increase of cultivation expected is 9,500 acres, and of revenue 33,250 rupees. Plans and estimates have yet to be drawn up, and further enquiry made regarding the returns. It is not certain that the work will prove productive though it may be valuable as a protective work. The estimates might be ready by the end of the official year. ...	3·90	Nil.	1·50	2·00
(*h.*) Hindupur.	C Do. 3rd Circle.	The project provides for constructing an anicut across the Penniar River for the supply of 11 tanks with head sluices and channels. The district of Bellary having very little irrigation, the work would be of value as a protective work. Plans and estimates were prepared many years ago, but the project will need complete revision. Existing cultivation is expected to be improved, and 356 acres of waste land cultivated. Increased revenue expected, 10,906 rupees. Estimates may be submitted by the end of official year.	8·50	Nil.	Nil.	Nil.
(*i.*) Roddam.	Project Division. 3rd Circle.	The project provides for an anicut across the Pennair to supply Roddam large tank, and would, like the work above, be useful as a protective work. Plans and estimates were prepared many years ago, but the project needs complete revision. Existing cultivation is expected to be improved, and 1,344 acres of waste land cultivated. Increased revenue expected 9,105 rupees. Estimates may be submitted by the end of the official year.	2·00	Nil.	1·50	0·50
(*j.*) Complete revised project for the Godavari Delta Works.	D Do	The work to be done is the revision of certain of the estimates already sanctioned, the examination of estimates submitted, and framing one complete estimate. Beyond those already submitted, there will probably be estimates amounting to 24,00,000 rupees required. It is thought that under special arrangements now being made the estimates will be ready for submission in five or six months.... ...	1·40	Nil.	Nil.	1·00
(*k.*) Complete revised project for the Kistna Delta Works.	Do	The same work has to be done as above. Estimates have been prepared and but little revision is expected to be necessary. Revenue returns have to be obtained. These estimates may be expected to be ready for submission by the end of the year or a little after	60·00	Nil.	5·00	5·00
(*l.*) Perryaur.	Do	The project provides for constructing a concrete dam of 170 feet in height and turning the water of the Perryaur river, which now runs into Travancore, into the Madura District. It will it is thought prove invaluable as a protective work. The net return expected from the work is 5,15,000 rupees per annum constituting it also a "Productive." The out-door surveying &c., has been done, and the project has only to be put into shape and may be submitted by the end of the year. ...	140·00	Nil.	5·00	5·00
(*m.*) Poogalur Channel.	Do	The project provides for improving an existing channel, and work was commenced for Famine Relief, 95,057 rupees having been spent on it. The existing irrigation is expected to be improved, and 5,100 acres additional land cultivated; the increase of revenue expected is 48,000 rupees. The estimates have	70·00	Nil.	1·00	5·00

* *N.B.*—No outlay is shown in 1881-82 against the Buckingham Canal above, as the funds for the current year are being found for "Provincial." At the same time it is much to be desired that a portion if not the whole of the current years assignment may be charged against "Imperial Protective" so as to liberate Provincial Funds most urgently needed for other purposes.

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82	1882-83	1883-84
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
		been submitted and returned for revision, and may probably be ready by the end of the year.	3·70	Nil.	1·00	2·00
(*n.*) Rooshkoolia.	D Project Division. 3rd Circle.	The project provides for an anicut across the Korakory river in the Ganjam District, improving and constructing channels and embanking a natural lagoon in a part of the country where protective works are much needed. Provision is made for 64 miles of navigable canal and for two reservoirs. The area to be irrigated is 1,20,000 acres, and a return of 4 per cent. on the total outlay is expected. The plans and estimates have been prepared, and may be put into shape for submission without delay	26·00	Nil.	2·00	2·50
(*o.*) Palar Anicut.	Unassigned as yet.	The project is for improvements to existing channels under the anicut on the South side. Plans and estimates have been prepared, but not yet submitted, and information is needed as to cultivation and revenue expected.	2·50	Nil.	Nil.	Nil.
(*p.*) Atur Anicut.	Do.	This project provides for an anicut on the Guddebum in South Arcot District. The estimate has been submitted and returned for revision. Information regarding cultivation, &c., is as yet not available. The estimates might be completed in three or four months.	0·54	Nil.	Nil.	Nil.
(*q.*) Lower Coleroon Anicut.	Do.	This project provides for the improvement of existing irrigation under the Lower Coleroon Anicut in South Arcot; the subject has not yet been taken up, but it seems certain that great improvements can be made, and the cultivation extended. The estimates could be prepared within a year.	6·50	Nil.	Nil.	Nil.
(*r.*) Bhawani Reservoir	Do.	This is a project for forming a large reservior on one of the tributaries of the Cavari river with a view to storing some portion of the flood waters which now runs to waste, Preliminary investigations have been made, and it is thought that by the construction of the reservior, not only would the supply for the Tanjore Delta be thus improved, when occasioually deficient, but over 300,000 acres of additional direct irrigation be secured.	40·00	Nil.	Nil.	Nil.
		TOTALS ...	425·84	0·75	25·00	35·00

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PUBLIC WORKS DEPARTMENT.

General Establishment.

No. 1,697 W.

No. 9.

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 desired, in reply to your letter, No. 681 G., dated 5th May 1881, having reference to the normal strength of establishment for the Public Works Department in this Presidency, to state that the Government very thankfully accept the scale and the general arrangement into six Superintending Engineers' Circles as suggested by the Government of India, though as regards the former some additions have recently shown themselves to be necessary, and as regards the latter, local circumstances require slight modifications which will be immediately explained.

2. There is now, I am to observe, no further discussion as to the appointment of Superintendents of Works for—

(1) Vizagapatam and Ganjam Divisions,
(2) the Godávari Delta, do.
(3) the Kistna Delta, do.
(4) the Buckingham Canal,
(5) the Presidency including Bangalore;

but one officer of this class will still remain, viz., the Consulting Architect assented to under paragraph 3 of your letter, No. 1,918 G., dated 4th November 1880.

3. It is also a matter of question with this Government whether the important station of Bangalore should not again be formed into a separate division, in case the new Army Organization Scheme be carried into effect, as it would then in all probability become Army Head-quarters for the Presidency. For the present, however, no immediate change seems necessary.

4. With reference to the additions required to the scale as originally sent up, I am in the first place to note that (1) the Madras Irrigation Company's Canal (soon about to be taken over) and the Sungum Project sanctioned by the Government of India in their letter, No. 188 I., dated 6th May 1881, in Nellore (the arrangements for prosecuting which have already been commenced by appointing the officers and several of the subordinates, &c.,) must be included.

5. To these requirements must further be added two officers in the grades of Executive Engineers omitted by a clerical error in the "Distribution Statement" which accompanied my letter, No. 2,277 W., dated 1st October 1880, where it will be observed that under the head "Supernumeraries" calculated at 10 per cent. only *one* officer has by oversight been shown in the grades of Executive Engineer instead of *three*.

6. The additions to the scale will therefore stand as under :—

——	Executive Engineers.	Assistant Engineers.	Upper Subordinates.
For the Madras Irrigation and Canal Company, see Government of India letter, No. 207 I., dated 16th May 1881.	1	2	6
For the Sungum Project sanctioned by the Government of India letter, No. 188 I., dated 6th May 1881.	1	2	6
To rectify error in the previous Distribution Statement ...	2	...	...
Total ...	4	4	12

7. If the four additional Executive Engineers be distributed in the strength of one to each of the sanctioned grades and the Assistant Engineers be divided equally between the 1st grade and the 2nd and 3rd grades combined, the modified normal establishment would then stand as follows (paragraphs 5 and 6 of your letter under reply) :—

Chief Engineers.

1st Class	1
2nd „	1
3rd „	1
	3

Superintending Engineers.

1st Class	2
2nd „	2
3rd „	2
	6

Executive Engineers.

1st Grade	10
2nd „	11
3rd „	11
4th „	4
	36

Assistant Engineers.

1st Grade	26
2nd and 3rd Grades	21
	47
Upper Subordinates of all grades	185

8. The attached Distribution Appendix **A** shows the circles and divisions, and Appendix **B** the cost in prescribed form, both in substitution of those originally submitted for sanction.

9. As regards **A**, the distribution, it will be observed, differs somewhat from that suggested by the Government of India, though No. I Circle is the same as that given in paragraph 3 of your letter. No. II Circle will now consist of the two Kistna Divisions, the Sungum Project and Nellore instead of the Buckingham Canal, which latter will much better fit into No. V Circle.

10. The Nellore Division with the Sungum Project will be a sufficient addition to the Kistna Delta works, and should the completion estimates for the latter be sanctioned as may be early looked for, the Superintending Engineer will have quite as much if not more than he can satisfactorily administer.

11. All the other circles have been made out strictly with reference to the actual works in progress and proposed, so as at once to give each Superintending

Engineer ample employment and the best centre from which to supervise the operations of that portion of the department under his charge.

12. To three of these circles have also been assigned such of the new project divisions as fall naturally within their respective limits; the 4th of these, Division (D), being, however, reserved specially for personal supervision by the Chief Engineer for Irrigation for reasons subsequently to be explained.

13. Turning to Appendix **B** it will be noted that the total annual charge for establishment is raised from 16·13 (the total present charge) to 20·64 lakhs; but as the outlay on both Protective and Productive works increases annually till the total expenditure by the department more than doubles what it is at present (a little over 50 lakhs), the high percentage now apparent will disappear in course of time.

14. It being the intention of Government to initiate the redistribution of charges, &c., under the new scale from the 1st August, the total outlay on establishment for the current year would generally stand as follows :—

	At per Annum. LAKHS.	LAKHS.
To four months, April to July (both inclusive) 1881, as per Part iii, Budget of Provincial Services for 1881-82	16·13	5·38
To eight months from 1st August 1881 as per Appendix **B**	20·64	13·79
Total for Current Official Year		19·17

15. This amount cannot however be worked up to as it will take time to fill all vacancies in the Engineer and Subordinate grades.

There are moreover several modifications to be introduced later on when it is more accurately known how the vacancies in the Gradation List are to be filled up, and when instructions have been received as to the incidence of the charges affecting the Imperial and Provincial Budgets.

16. In regard to the latter point, your letter (paragraph 7) lays down that $2\frac{1}{2}$ lakhs will be contributed during the current year from the general grant for "Protective" Public Works; and again in paragraph 10 an intimation is understood to be conveyed that the Government of India would not be indisposed to consider the advisability of debiting a portion of the charge for Irrigation Establishment against the revenue of the works on which they are engaged.

17. The subject of the latter proposal has already been submitted for the consideration of His Excellency the Governor-General in Council in G.O. of 12th April 1881, Nos. 269 and 270 I., and on receipt of a reply it will be possible to deal with the mode of distributing the charges among the different budgets.

18. With reference, however, to the contribution from Imperial of the $2\frac{1}{2}$ lakhs, I am to state that this Government propose to appropriate at once Rs. 75,000 for pushing on as a "Protective" work the Potinghy Ghat in Vizagapatam (to be adverted to further on), setting free a corresponding amount which is most urgently needed for the execution of a number of buildings, &c., which, as will be seen from Part B of the Provincial Budget for the current year, cannot otherwise be met for years to come, and to reserve the remaining Rs. 1,75,000 as a contribution towards the general establishment charges of the current year.

19. I am now to advert to the subject-matter of paragraph 11 of your letter under reply, and, in so doing, to submit for approval the Gradation List Appendix **C** containing the promotions which it is intended to give effect to from the 1st August, as being the date from which it is desired by this Government to constitute, as far as may be possible, the new divisions and circles of superintendence, and for which all the requisite arrangements are being made.

20. In reference to your remark that it would lead to inordinately rapid promotion to fill up the vacancies in the higher grades altogether from the lower grades of the present Madras staff, it may at once be stated that, owing to the number of Royal Engineers in the higher grades who went to England on the special furlough on the occasion of the late reductions, and who will shortly return to duty (Lieutenant-Colonel Burton, R.E., has been telegraphed for to take up the Presidency Division,

and will be here by 1st August), as also to other causes unnecessary to detail, there will practically be no promotions to speak of till the 3rd-grade Executive Engineer is reached, and only nine vacancies in the combined 2nd and 3rd grades Assistant Engineers to make up.

21. Among the Chief Engineers there is no promotion, while in the three classes of Superintending Engineers the first promotion is that of Colonel W. Chrystie from third to second class. This officer will not only have nearly twenty-six years' service in the department on the 1st August, but has frequently, during several years past, acted as Superintending Engineer, 2nd Grade, in both Mysore and Madras. The second promotion is that of Mr. Rundall from 1st-grade Executive Engineer to 3rd-class Superintending Engineer. He has likewise twenty-six years' service in the department, and has for some time acted, with great credit to himself, as Superintending Engineer.

22. These are both excellent officers of great experience, and could not possibly with any considerations of justice be superseded by an officer introduced from another province.

23. It is also especially to be observed with reference to this that the insertion of a fresh officer in any of the classes of Superintending Engineer would cause an excess of one in the number of 1st-grade Executive Engineers. This latter is now full and there will be no promotions.

24. In the 2nd grade, owing to the late introduction of Major A. T. Fraser from the Mysore Department, and the return of Major S. C. Clarke from the Railway Department under the Government of India, there is only one promotion from the 3rd grade—Captain D. McNeil Campbell, a very promising officer with twelve and-a-quarter years' service in the department.

25. Among the Executive Engineers, 3rd Grade, on the new scale there will be one officer reinstated, Mr. R. W. Norris, and five promotions from the 4th grade, viz., Messrs. Peters, Hughes, Larminie, Bell, and Captain Smart, R.E., all of whom have service in the department ranging from fourteen to over ten years.

26. Mr. Norris' case is peculiar. His name was included in the late reductions, and after retirement he accepted employment as Local Fund Engineer, North Arcot; but as he is a specially trained Irrigation Officer whose services would be very valuable, this Government have considered it desirable to reinstate him, and he has been directed to report himself for duty on 1st August. It is not considered desirable in the interests of the public service that any other of the officers previously reduced should now be reinstated.

27. The list shows two promotions from 1st-grade Assistant Engineer to 4th-grade Executive, viz., Mr. Grimes (an old officer who commenced as a military subordinate) and Lieutenant C. B. Henderson, R.E., who has more than eight years' service in the department.

28. In addition to these four officers who would complete the scale, it has been thought desirable to enter the name of Mr. Wilks as temporary Executive Engineer.

29. This officer is now second on the staff of the Madras Irrigation and Canal Company, and although, as previously reported (*vide* letter No. 202 I., dated 18th March 1881), it would be inexpedient to place him in the position of a Superintendent of Works for the canal on the work being taken over from the Company, it is thought that, owing to his local knowledge and experience as an Engineer, he may very possibly be quite capable of remaining in charge as Executive Engineer under the immediate direction of the Superintending Engineer of the Circle. In any case, I am to say, this Government is prepared to make the experiment, and as the best means of doing so would wish Mr. Wilks, during his term of probation (a year), to be borne on the strength of the department in the manner now proposed, should he be willing to accept the position.

30. If he subsequently gives satisfaction, his permanent grading will not occasion any serious difficulty, as in all probability before the time comes one or more vacancies in the higher grades will almost certainly occur.

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31. Proceeding to the Assistant Engineers, it will be observed that there are eleven promotions from 2nd to 1st grade, the junior, Mr. W. Jopp, having very nearly four years' service in the department on 1st August. As the senior, Lieutenant O. V. Boddy, has a little over eight years' service, it is believed that these limits correspond very closely to the lengths of service in this grade, which it is the desire of the Government of India to secure for future working.

32. It was the original intention of this Government to promote into this grade, on precisely the same honorary footing as military subordinates, Sub-Engineers S. Ottmann and J. W. Ellis, whose cases were submitted specially (see margin) for the consideration of the Government of India, and even now the Government were prepared, failing this arrangement, to bring them permanently on the strength of the Engineer Establishment; but their promotion having lately been definitely barred by the orders contained in your letter, No. 797 G., dated 10th June 1881, their names have been removed from the list. I am, however, to submit that this Government still entertains a strong conviction that it would be both advantageous to the public service to promote these very deserving subordinates, and in every way politic to do so, especially at this juncture, when their advancement can be effected with much less hardship to others than would at any other time be possible.

This department letter, No. 1,134 W., dated 2nd May 1881.

33. I am therefore to solicit further consideration on this point, and to state that, if the Government of India sees fit to grant the concession, their names might be introduced immediately below that of Mr. H. E. G. Evans.

34. At the bottom of the list there are nine vacancies in the combined 2nd and 3rd grades of Assistant Engineers, and as it is unlikely that officers in these grades would care to be transferred from other provinces, this Government desires to be given complete freedom of selection within, of course, Code rules.

35. Should any Royal or Cooper's Hill Engineers, however, desire to enter, they could at once be posted according to length of service. Otherwise the Honorable the Governor in Council would be disposed to select one or two of the most promising youths who have of late years passed out of the Civil Engineering College, Madras, with certificates as Assistant Engineers, and fill up the remaining vacancies as opportunity offers.

36. In concluding this part of the subject, I am in the *first* place to observe that a comparison of the respective lengths of service of the officers in the Madras Department with those in other provinces more immediately under the Government of India as shown by the published classified lists, has established so clearly the fact that, the former have in all grades been hitherto unduly retarded in promotion, that the Honorable the Governor in Council would strongly deprecate the introduction, (certainly in any of the grades above Assistant Engineers) of officers from other provinces; and in the *second*, that a very early acceptance of the Gradation List by the Government of India as now sent up is so desirable (with a view to the promotions being gazetted by the 1st August) that, I am to solicit the favor of sanction to the same being telegraphed as soon as possible after receipt of the present communication.

37. In reference to the desire expressed, paragraph 13 of the letter under reply, that room should be found among the Upper Subordinates for those of this class who were originally transferred from Madras to Mysore, I am to state that this has already been done, and the three who could alone be spared from Mysore (see margin) have already joined this department.

Conductor FitzGibbon, Sub-Engineer, 2nd Grade.
Sergeant Heinig, Sub-Engineer, 3rd Grade.
Conductor Keenan, do. do.

38. I am now to invite attention to the four Divisions which it is proposed, in accordance with the original programme, to constitute with the object of preparing such projects as mainly fall within the class of *Protective* works, to be executed from the Imperial grant under this head.

39. As a convenience the information called for regarding this subject (paragraph 8 of your letter) giving the list of projects under preparation, and those which it is proposed to prepare during 1882-83, is shown in the Appendix D, regarding which the following general observations will, it is hoped, suffice.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1881 Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated July, 9th.

Issued

Re *Encl.*

G.O., 9th July 1881, *No.* 1,697 W.

JULY.
No. 9.

RELATIVE to the normal strength of establishment for the Public Works Department, Madras Presidency.

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APPENDIX A.

Distribution Statement of Reorganized Department Public Works, Madras.

Superintending Engineers' Circles.	Executive Divisions.	Sub-Divisions.	Establishment: Executive Engineers.	Assistant Engineers.	Upper Subordinates.
No. I ...	1. Ganjam	2	1	1	4
	2. Vizagapatam	2	1	1	4
	3. Eastern Godávari	3	1	2	7
	4. Western do.	2	1	3	7
	5. (A) Project Division ...	...		2	3
No. II ...	6. Eastern Kistna	3	1	3	6
	7. Western do.	2	1	2	7
	8. Nellore	2	1	1	7
	9. Sungum Project	2	1	2	6
No. III ...	10. Bellary	2	1	...	4
	11. Cuddapah	2	1	1	6
	12. Kurnool	1	1	1	4
	13. Madras Irrigation and Canal Company's Canal ...	2	1	2	6
	14. (C) Project Division ...	...	1	2	3
No. IV ...	15. West Coast	3	1	2	12
	16. Coimbatore	2	1	1	5
	17. Salem	...	1	...	5
	18. North Arcot	2	1	2	5
	19. (B) Project Division ...	...	1	1	4
No. V ...	20. South Arcot	1	1	1	5
	21. Chingleput	2	1	1	6
	22. Buckingham Canal ...	3	1	1	4
	23. Presidency and Bangalore	2	1	2	7
No. VI ...	24. Trichinopoly	2	1	1	8
	25. Tanjore	2	1	2	8
	26. Negapatam	2	1	2	7
	27. Madura	2	1	1	8
	28. Tinnevelly	2	1	2	7
Supt. of Works.	29. Consulting Architect ...	...	1	...	2
Chief Engr. for Irrigation.	30. (D) Project Division ...	...	1	...	...
	Secretariat	...	1	1	...
	Guaranteed Railways ...	...	2	...	* ...
	Supernumeraries	...	3	4	18
	Totals ...	50	36	47	185

* Includes two for Workshops.

APPENDIX B.

Statement showing the proposed changes in the Establishment of the Public Works Department, Madras Presidency, under sanction accorded in letter from the Government of India. No. 681G, dated 5th May, 1881.

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
ENGINEER ESTABLISHMENT.											
Chief Engineers.											
1	Chief Engineer, 1st Class	2,500	1	Chief Engineer, 1st Class	2,500	0	0	0	0		
1	Chief Engineer, 2nd Class	2,000	1	Chief Engineer, 2nd Class	2,000	0	0	0	0		
2	Chief Engineers	4,500	2	Chief Engineers	4,500	0	0	0	0		
Superintending Engineers.											
3	Superintending Engineers, 1st Class at 1,600	4,800	3	Superintending Engineers, 1st Class at 1,600	4,800	0	0	0	0	A Includes the appointment of the Consulting Engineer for Guaranteed Railways, which is at present held by Colonel Shaw-Stewart, R. E., Chief Engineer, 3rd Class.	
1	Superintending Engineer, 2nd Class	1,350	2	Superintending Engineers, 2nd Class at 1,350	2,700	1	1,350	0	0	The number (7) of Superintending Engineers suggested by the Government of India in letter No. 681 G., dated 5th May 1881, para 5, has been divided into the scale of 3, 2 and 2 with reference to para 66, Chap. I. Madras P. W. D. Code.	
1	Superintending Engineer, 3rd Class	1,100	2	Superintending Engineers, 3rd Class at 1,100	2,200	1	1,100	0	0		
5	Superintending Engineers.	7,250	7	Superintending Engineers.	9,700	2	2,450	0	0		
Executive Engineers.											
7	Executive Engineers, 1st Grade, at 950.	6,650	10	Executive Engineers, 1st Grade, at 950.	9,500	3	2,850	...	...	B Includes the two Deputy Consulting Engineers ~~on one sept of works~~ In Government of India, letter No. 681, G., dated 5th May, 1881, quoted above, the scale proposed for Executive Engineers, is 9, 10, 10, 3,=32; to this has been added the four additional Executive Engineers, viz. For Madras Irrigation and Canal Company ... ... 1 " Sungum Project ... ... 1 Omission from the scale submitted by Madras Government, to Government of India, in not putting down the proper number of Executive Engineers. For 10 per cent. required to take the place of absentees, only 1 being given instead of 3 ... ... 2 Total... 4	
8	Executive Engineers, 2nd Grade, at 800.	6,400	11	Executive Engineers, 2nd Grade, at 800.	8,800	3	2,400	...	...		
7	Executive Engineers, 3rd Grade, at 650.	4,550	11	Executive Engineers, 3rd Grade, at 650.	7,150	4	2,600	...	...		
4	Executive Engineers, 4th Grade, at 550.	2,200	4	Executive Engineers, 4th Grade, at 550.	2,200	...	...	...	...		
B 26	Executive Engineers.	19,800	B 36	Executive Engineers.	27,650	10	7,850	...	...		

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				Assistant Engineers.							
20	Assistant Engineers, 1st Grade, at 450.	9,000	26	Assistant Engineers, 1st Grade, at 450.	11,700	6	2,700	...	...		To the scale of 24 and 19=43, suggested by the Government of India, in letter No. 681, G., quoted above, has been added 2 and 2=4, viz., For Madras Irrigation and Canal Company... ... 2 „ Sungum Project... ... ... 2 Total... 4
16	Assistant Engineers, 2nd and 3rd Grades, at 350 and 250.	5,400	21	Assistant Engineers, 2nd and 3rd Grades.	7,050	5	1,650	...	...		
36	Assistant Engineers.	14,400	47	Assistant Engineers.	18,750	11	4,350	...	...		The 21 Assistant Engineers of the 2nd and 3rd Grades, now proposed, have been divided into 18, 2nd Grades, and 3, 3rd Grades.
69	Total Engineer Establishment.	45,950	92	Total Engineer Establishment.	60,600	23	14,650	...	...		
				Upper Subordinate Establishment.							
				Sub-Engineers.							
5	Sub-Engineers, 1st Grade at Rs.400.	2,000	9	Sub-Engineers, 1st Grade at 400	3,600	4	1,600	...	...		
4	Do 2nd Grade at Rs.300.	1,200	9	Do 2nd Grade at 300	2,700	5	1,500	...	...		
9	Do 3rd Grade at Rs.250.	2,250	17	Do 3rd Grade at 250	4,250	8	2,000	...	...		
18	Sub-Engineers.	5,450	35	Sub-Engineers	10,550	17	5,100	...	...		
				Supervisors.							
14	Supervisors, 1st Grade at 200	2,800	22	Supervisors, 1st Grade at 200	4,400	8	1,600	...	...		The total number 185 of Upper Subordinates has been divided amongst the several grades in accordance with Code proportions, vide Government of India, P.W.D. Code, Chap. I, paras 51 to 54 as amended by S. O. No. 110 of 2nd February, 1881. See also Government of India Resolution No. 1789 G., dated 15th October, 1880.
22	Supervisors, 2nd Grade at Rs. 150	3,300	36	Do 2nd Grade at 150	5,400	14	2,100	...	...		
36	Supervisors	6,100	58	Supervisors	9,800	22	3,700	...	...		
				Overseers.							
32	Overseers, 1st Grade at 100	3,200	28	Overseers, 1st Grade at 100	2,800	...	...	4	400		The distribution into 1st, 2nd, and 3rd Grades of the 92 Overseers has been made as follows :— 1st Grade $\frac{3}{10}$ of total No. of Overseers ... 28 2nd do $\frac{3}{10}$ do do do ... 28 3rd do $\frac{4}{10}$ do do do or remainder... 36 Total... 92
32	Do 2nd Grade at Rs.80	2,560	28	Do 2nd Grade at Rs.80	2,240	...	...	4	320		
42	Do 3rd Grade at Rs.60	2,520	36	Do 3rd Grade at Rs.60	2,160	...	...	6	360		
106	Overseers	8,280	92	Overseers	7,200	...	...	14	1,080		
160	Total Upper Subordinate Establishment	19,830	185	Total Upper Subordinate Establishment	27,550	39	8,800	14	1,080	Net increase Rs.7720	
				Surveyors ranking as Upper Subordinates.							
...	...	...	4	Surveyors at 200	800	4	800	..	...		These Surveyors have been provided for the four Project Divisions which are to be formed for the preparation of projects for Famine Relief Works, &c. Vide para 7 of Government of India letter, No. 681 G., dated 5th May, 1881. Amounts noted as pay include Travelling Allowances.
...	...	...	4	Do do 150.	600	4	600	...	...		
...	...	...	4	Do do 100	400	4	400	...	...		
...	...	...	4	Do do 80	320	4	320	...	...		
...	Surveyors	...	16	Surveyors	2,120	16	2,120	...	...		
160	Grand Total Upper Subordinates	19,830	201	Grand Total Upper Subordinates	29,670	55	10,920	14	1,080		
				Lower Subordinate Establishment.							
5	Sub-Overseers, 1st Grade at 60	300	5	Sub-Overseers, 1st Grade at 60	300						The numbers and amounts entered in column "Present Scale" represent the Establishment of the Trichinopoly, Kurnool and Vizagapatam District at the close of last official year 1880-81. Since then the Local Fund works and establishment of the Vizagapatam District have been tranferred to Local Fund Boards. The numbers 5 and 14 shown in column "Proposed Scale" represent the actual existing Lower Subordinate Establishment in Trichinopoly and Kurnool Districts.
...	Sub-Overseers, 2nd Grade	...	...	Sub-Overseers, 2nd Grade	...						
15	Sub-Overseers, Third Grade at Rs.20.	300	14	Sub-Overseers, Third Grade at Rs.20.	280			1	20		
20	Total Lower Subordinate Establishment.	600	19	Total Lower Subordinate Establishment.	580			1	20		
				Petty Establishment.							
				Store-keepers.							
4	Storekeepers @ 30	120	4	Storekeepers at 30	120						The numbers entered in the column "Present Scale" are those for which provision was made in the Provincial Budget for 1881-82. (G. O. No. 1204 W. dated 20th May 1880.) To these numbers have been added 5 additional Storekeepers for the 5 new Divisions, the grading of each being given with reference to the classification of the new Divisions.
6	Do. @ 25	150	7	do at 25	175	1	25				
7	Do. @ 20	140.	8	do at 20	160	1	20				
3	Do. @ 15	45	6	do at 15	90	3	45				
20		455	25		545	5	90				
				Medical Establishment.							
1	Assistant Apothecary.	62½	1	Assistant Apothecary.	62½						The amounts entered in columns "Present" and "Proposed Scale" represent contributions by the Public Works Department for the pay of the Medical Establishment at Bezwada, Dowlaishvaram and Vizagapatam. Vide G. O.s No. 1346 W. 1382 W., 1935 W, dated 8th and 14th June 1880 and 12th August 1880.
4	Hospital Assistants with Jeypore Allowance for one at Rs.25 per mensem. 1 at 60=60 1 at 40=40 2 at 25=50		4	Hospital Assistants with Jeypore Allowance for one at Rs.25 per mensem. 1 at 60=60 1 at 40=40 2 at 25=50							
	Jeypore Allowance. } Rs.25.	175		Jeypore Allowance. } Rs.25.	175						
11	Lascars, Toties, Cook, &c., of the Medical Establishment. 1 at 7 = 7 3 at 6 =18 1 at 4 = 4 1 at 3½= 3½ 4 at 2½=10 1 at 2 = 2		11	Lascars, Toties, Cook, &c., of the Medical Establishment. 1 at 7 = 7 3 at 6 =18 1 at 4 = 4 1 at 3½= 3½ 4 at 2½=10 1 at 2 = 2							
1	Gumastah.	44½ 5	1	Gumastah.	44½ 5	...					

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
1	Maistry.	40	1	Maistry.	40	...	...	...	...		For the Cuddapah Division, specially sanctioned by G.O. No. 1882 W. dated, 7th August 1880.
410	Lascars at 6.	2,460	495	Lascars at 6.	2,970	85	510	...	...		The number (495) entered in the column 'Proposed Scale' has been arrived at as follows :—
											6 Superintending Engineers' Offices at 4 each 24
											24 Divisions at 3 each 72
											1 Consulting Architect 2
											50 Sub-Divisions at 3 each 150
											182 Detached Officers, viz. 6 Asst. Engineers, 84 Sub-Engineers and Supervisors, and 92 Overseers, at 1 each ... 182
											Buckingham Canal Division—Vide G. O., No. 1081, dated 25th April 1881 5
											P. W. Stores 12
											Examiner's Office 3
											Total. 450
											Add 10 per cent for Contingencies 45
											Total. 495
448	Total Petty Establishment.	3,242	538	Total Petty Establishment.	3,842	90	600	...	...		

OFFICE ESTABLISHMENT.

For Chief Engineer and Secretary to Government, P. W. Department.

1	Chief Assistan.	600	1	Chief Assistant.	600						
1	Second Assistant.t	300	1	Second Assistant.	300						
1	Clerk I Class 3rd Grade.	225	1	Clerk I Class 3rd Grade.	225						
2	Clerks II Class, 2nd Grade at 140.	280	2	Clerk II Class, 2nd Grade at 140.	280						
1	Clerk II Class, 3rd Grade.	110	1	Clerk II Class, 3rd Grade.	110						
5	Clerks III Class 2nd Grade at 70.	350	5	Clerks III Class 2nd Grade at 70.	350						
3	Clerks III Class 3rd Grade at 55.	165	3	Clerks III Class, 3rd Grade at 55.	165						
1	Clerk IV Class, 1st Grade.	45	1	Clerk IV Class 1st Grade.	45						
2	Clerk IV Class, 2nd Grade at 35.	70	2	Clerks IV Class, 2nd Grade at 35.	70						
1	Clerk IV Class, 3rd Grade.	25	1	Clerk IV Class, 3rd Grade.	25						
18		2,170	18		2,170						
2	Draughtsmen, 1st Class at 60.	120	2	Draughtsmen, 1st Class at 60.	120						
1	Draughtsmen, 2nd Class	42½	1	Draughtsmen 2nd Class	42½						
3		162½	3		162½	...	...	...	...		
2	Muchis at 13 and 14...	27	2	Muchis at 13 and 14...	27						
2	Head Messengers at 9 and 12.	21	2	Head Messengers at 9 and 12.	21						
7	Messengers 3 at 7 and 4 at 8.	53	7	Messengers 3 at 7 and 4 at 8.	53						
11		101	11		101	...	...	...	...		
				Total Public Works	2433½		...	...	...		
32	Total P. W. Secretariat Office Establishment.	2433½	32	Secretariat Office Establishment.							

Lithographic Establishment.

1	Superintendent ...	250	1	Superintendent ..	250						
1	Head Draughtsman ...	120	1	Head Draughtsman ...	120						
1	Second do ...	100	1	Second do ...	100						
1	Third do ...	80	1	Third do ...	80						
1	Fourth do ...	60	1	Fourth do ...	60						
1	5th do ...	40	1	5th do ...	40						
1	6th do ...	30	1	6th do ...	30						
1	7th do ...	25	1	7th do ...	25						
1	8th do ...	20	1	8th do ..	20						
1	9th do ..	15	1	9th do ...	15						
1	10th do ...	10	1	10th do ...	10						
1	Tracer & Recordkeeper	25	1	Tracer & Recordkeeper	25						
1	Tracer and Muchi ...	16	1	Tracer and Muchi ...	16						
1	Head Printer ...	20	1	Head Printer ...	20						
1	2nd do ...	12	1	2nd do ...	12						
1	3rd do ...	12	1	3rd do ...	12						
2	Pressmen at 9 ...	18	2	Pressmen at 9 ...	18						
6	do at 8 ...	48	6	do at 8 ...	48						
2	do at 7 ...	14	2	do at 7 ...	14						
2	do at 5 ...	10	2	do at 5 ...	10						
28	Total Lithographic Establishment.	925	28	Total Lithographic Establishment.	925	...	...	...	...		

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Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				For Chief Engineer and Joint Secretary to Government, (Irrigation Branch)							
1	Clerk I Class, 3rd Grade.	225	1	Clerk I Class, 3rd Grade.	225						
1	Do. II do. 2nd do...	140	1	Do. II do. 2nd do...	140						
1	Do. II do. 3rd do...	110	1	Do. II do. 3rd do...	110						
1	Do. III do. 1st do...	90	1	Do. III do. 1st do...	90						
1	Do. III do. 2nd do...	70	1	Do. III do. 2nd do...	70						
1	Do. III do. 3rd do...	55	1	Do. III do. 3rd do...	55						
2	Do. IV do. 1st Grade at 45	90	2	Do. IV do. 1st Grade at 45	90						
3	Do. IV do. 2nd Grade at 35	105	3	Do. IV do. 2nd Grade at 35	105						
1	Do. IV do. 3rd do...	25	1	Do. IV do. 3rd do...	25						
12		910	12		910						
1	Draughtsman 1st Class	60	1	Draughtsman 1st Class.	60						
2	Do. 2nd do. at 42-8-0	85	2	Do. 2nd do at 42-8-0	85						
3		145	3		145						
2	Draughtsmen 3rd Class at 25	50	2	Draughtsmen 3rd Class at 25	50						
		195	5		195						
	Reference Picker ...	10	1	Reference Picker ...	10						
	Muchi ...	10	1	Muchi ...	10						
	Head Messenger ...	8	1	Head Messenger ...	8						
	Messengers at 7 ...	14	2	Messenger at 7 ...	14						
	Do. at 6 ...	12	2	Do. at 6 ...	12						
3	Lascars at 7 ...	21	3	Lascars at 7 ...	21						
		75	10		75						
27	Total Office Establishment for Chief Engineer for Irrigation.	1180	27	Total Office Establishment for Chief Engineer for Irrigation.	1180						
				For Superintending Engineers.							
1	Clerk II Class 3rd Grade	110	1	Clerk II Class 3rd Grade	110					The one additional Clerk IV Class, 3rd Grade, provided for in current year's (1881-82) Budget for each Superintending Engineer's Office has been added in the column "Proposed Scale," and allowed for the three additional Superintending Engineers' Offices also.	
1	Do III do 2nd do...	70	1	Do III do 2nd do...	70						
1	Do IV do 1st do...	45	1	Do IV do 1st do...	45						
1	Do IV do 2nd do...	35	1	Do IV do 2nd do...	35						
1	Do IV do 3rd do...	25	2	Do IV do 3rd do ..	50	1	25				
1	Draughtsman 1st Class	60	1	Draughtsman 1st Class.	60						
1	Do 2nd do ..	42½	1	Do 2nd do ...	42½						
1	Messenger at 8 ...	8	1	Messenger at 8 ...	8						
3	Do at 6 ...	18	3	Do at 6 ...	18						
11		413½	12		438½	1	25				
22	Add similar establishment for two more Superintending Engineers	827	24	Add similar establishment for two more Superintending Engineers	877	2	50				
			36	Add similar establishment for 3 additional Superintending Engineers' Offices	1,315½	36	1,815½				
33	Total Office Establishment of Superintending Engineers	1,240½	72	Total Office Establishment of Superintending Engineers	2,631	39	1,390½				
				For Presidency Division.							
1	Clerk III Class 2nd Grade	70	1	Clerk III Class, 2nd Grade	70	...	...			The numbers and amounts shown in column "Present Scale" represent the scale for a 1st Class Division as laid down in Appendix C, No.5, to G.O. No.3674, W, dated 18th September 1878. To these have been added the additional establishment provided in the Provincial Budget, for the current year 1881-82, and the totals thus obtained have been shown in the column "Proposed Scale."	
1	Clerk IV Class 1st Grade	45	1	Clerk IV Class 1st Grade	45	...	...				
1	Do IV do 2nd do...	35	2	Do IV do 2nd Grade at 35	70	1	35				
1	Do IV do 3rd do...	25	3	Do IV do 3rd Grade at 25	75	2	50				
	Do V do 1st do...	...	2	Do V do 1st Grade at 17½	35	2	35				
1	Draughtsman 1st Class.	60	1	Draughtsman 1st Class.	60	...	...				
	Do 2nd do ...	...	1	Do 2nd do ...	42½	1	42½				
1	Do 3rd do ...	25	3	Do 3rd Class at 25	75	2	50				
1	Messengers at 7 ...	7	1	Messenger at 7 ...	7	...	...				
1	Do at 6 ...	6	1	Do at 6 ...	6	...	...				
8	Total Office Establishment ~~Superintendent of Works~~, Presidency Div...	273	16	Total Office Establishment ~~Superintendent for Works~~, Presidency Div...	485½	8	212½				

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Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				For Godavari Eastern and Kistna Eastern Divisions.							
1	Clerk, III Class, 2nd Grade	70	1	Clerk, III Class, 2nd Grade	70	...	...	...	...		The above remark applies equally to this Establishment.
1	Do. IV do, 1st do.	45	1	Do. IV do. 1st do.	45	...	...	...	...		
1	Do. IV do. 2nd do.	35	1	Do. IV do. 2nd do.	35	...	...	...	...		
1	Do. IV do. 3rd do.	25	3	Do IV do 3rd do at 25	75	2	50	...	...		
1	Draughtsman, 1st Class	60	1	Draughtsman, 1st Class	60	...	...	...	...		
1	Do. 3rd do.	25	1	Do. 3rd do.	25	...	...	...	...		
1	Messenger, at 7	7	1	Messenger at 7.	7	...	...	...	...		
1	Do. at 6	6	1	Do. at 6.	6	..	...	...	...		
8		273	10		323	2	50	...	...		
8	Add similar Establishment for one more office.	273	10		323	2	50	...	...		
16	Total Office Establishment Godavari Eastern and Kistna Eastern Divisions.	546	20		646	4	100	...	...		
				For 7 *1st Class Divisions.							
1	Clerk, III Class, 2nd Grade.	70	1	Clerk, III Class, 2nd Grade.	70	...	...	...	...		The foregoing remark applies equally to this Establishment. To the existing number (6) excluding Godavari Eastern and Kistna Eastern, of 1st Class Executive Divisions, has been added the "Madras Irrigation and Canal" Division, which has also been ranked as 1st Class.
1	Do. IV do. 1st do.	45	1	Do. IV do. 1st do.	45	...	...	...	...		
1	Do. IV do. 2nd do.	35	1	Do. IV do. 2nd do.	35	...	...	...	...		
1	Do. IV do. 3rd do.	25	2	Do. IV do. 3rd do. at 25.	50	1	25	...	...		
1	Draughtsman, 1st Class	60	1	Draughtsman, 1st Class	60	...	...	...	...		
1	Do. 3rd do.	25	1	Do. 3rd Class.	25	...	...	...	...		
1	Messenger at 7.	7	1	Messenger at 7.	7	...	...	...	...		
1	Do. at 6.	6	1	Do. at 6.	6	...	...	...	...		
8		273	9		298	1	25	...	...		
40	Add similar Establishment for five more 1st Class Divisions.	1365	45	Add similar Establishment for five more 1st Class Divisions.	1490	5	125	...	...		
			9	Add similar Establishment for one additional office (Madras Irrigation & Canal.)	298	9	298	...	...		
48	Total Office Establishment 6, 1st Class Divisions	1638	63	Total Office Establishment for 7, 1st Class Divisions.	2086	15	448				

*1. Godavari Western. 2. Kistna Western. 3. Madras Irrigation and Canal. 4. South Arcot. 5. Buckingham Canal. 6. Tanjore. 7. Tinnevelly.

				For 9, 2nd Class Divisions.*							
1	Clerk, III Class, 2nd Grade.	70	1	Clerk, III Class, 2nd Grade.	70						The Establishment for 2nd Class Executive Divisions remains in accordance with the scale laid down in Appendix C. No. 6, to G. O. No. 3674 W. dated 18th September 1878, no additional Establishment having been provided in current year's Budget.
1	Clerk, IV Class, 2nd Grade.	35	1	Clerk IV Class, 2nd Grade.	35						
2	Clerks, IV Class, 3rd Grade at 25.	50	2	Clerks, IV Class, 3rd Grade at 25.	50						
1	Draughtsman 1st Class	60	1	Draughtsman, 1st Class	60						
1	Do 3rd Class.	25	1	Do. 3rd Class	25						
1	Messenger at 7 ...	7	1	Messenger at 7 ...	7						
1	Do at 6 ...	6	1	Do at 6 ...	6						
8		253	8		253						
56	Add similar Establishment for 7 more 2nd Class Divisions.	1,771	56	Add similar Establishment for 7 more 2nd Class Divisions.	1,771						To the existing number (8) of 2nd Class Divisions, has been added the "Sungum Project Division," which has also been ranked as 2nd Class.
			8	Add similar Establishment for one 2nd Class additional division (Sungum Project Division.)	253	8	253				*1. Nellore. 2. Cuddapah, 3. West Coast, 4. Coimbatore, 5. North Arcot, 6. Chingleput, 7. Trichinopoly, 8. Negapatam, 9. Sungum Project Division.
64	Total Office Establishment for 8 2nd Class Divisions.	2,024	72	Total Office Establishment for 9 2nd Class Divisions.	2,277	8	253	...	...		

				For 5, 3rd Class Divisions.*							
1	Clerk, III Class, 3rd Grade.	55	1	Clerk, III Class, 3rd Grade.	55						The Establishment for the 3rd Class Divisions also remains in accordance with the scale laid down in Appendix C, No. 7 to G. O. No. 3674 W., dated 18th September 1878. To the existing number (2) of 3rd Class Divisions have been added the following three new Divisions, which have been ranked as 3rd Class :— Ganjam, Bellary, Madura
1	Clerk, IV Class, 2nd Grade.	35	1	Clerk, IV Class, 2nd Grade.	35						
2	Clerk IV Class, 3rd Grade at 25.	50	2	Clerks, IV Class 3rd Grade at 25.	50						
1	Draughtsman 2nd Class	42½	1	Draughtsma 2nd Class	42½						
1	Do 3rd Class.	25	1	Do 3rd Class.	25						
1	Messenger at 7.	7	1	Messenger at 7	7						
1	Do 6.	6	1	Do 6	6						
8		220½	8		220½						
8	Add similar Establishment for one more 3rd Class Office.	220½	8	Add similar Establishment for one more 3rd Class Office.	220½						
			24	Add similar Establishment for 3 additional 3rd Class Division Officers	661½	24	661½				*1. Ganjam. 2. Vizagapatam. 3. Bellary. 4. Salem. 5. Madura.
16	Total Office Establishment for 2, 3rd Class Divisions.	441	40	Total Office Establishment for 5, 3rd Class Divisions.	1,102½	24	661½	...	...		

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Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				For the Consulting Architect.							
1	Clerk, IV. Class, First Grade.	45	1	Clerk, IV. Class, First Grade.	45						
1	Draughtsman & Estimator	145	1	Draughtsman & Estimator	145						
1	Draughtsman 2nd Class	42½	1	Draughtsman 2nd Class	42½						
1	Do. 3rd do.	25	1	Do 3rd do.	25						
1	Messenger at 7.	7	1	Messenger at 7.	7						
1	Do. at 6.	6	1	Do. at 6.	6						
6	Total Office Establishment of Consulting Architect.	270½	6	Total Office Establishment of Consulting Architect.	270½						
				For Public Works Stores.							
1	Clerk, II Class, Second Grade.	140	1	Clerk, II Class, Second Grade	140						
1	Do. III do.	70	1	Do. III do.	70						
1	Do. IV do.	35	1	Do. IV do.	35						
1	Do. IV 3rd do.	25	1	Do. IV 3rd do.	25						
1	Messenger	8	1	Messenger.	8						
2	Do. at 7	14	2	Do at 7	14						
2	Do. at 6½	13	2	Do at 6½	13						
9	Total Office Establishment, P. W. Stores.	305	9	Total Office Establishment, P. W. Stores.	305						
				Office Establishment for 2 Superintendents of Works (Godavari and Kistna.)							
1	Clerk, III Class, 2nd Grade.	70								The offices close under the new arrangements and therefore no provision for it has been made.	
1	Clerk, IV Class, 1st Grade.	45									
1	Clerk, IV Class, 2nd Grade.	35									
1	Clerk, IV Class, 3rd Grade.	25									
1	Draughtsman, 1st Class	60									
1	Draughtsman, 3rd Class	25									
1	Messenger at 7	7									
1	Messenger at 6.	6									
8		273									
8	Add similar Establishment for one more Superintendent of Works office.	273									
16		546						16	546		

Nil.

				For the four New Project Divisions.							
			2	Draughtsmen, 1st Class at 60.	120	2	120				
			2	Draughtsmen, 2nd Class at 42½.	85	2	85				
			1	Clerk, IV Class, 2nd Grade.	35	1	35				
			1	Clerk, V Class, 1st Grade.	17½	1	17½				
			1	Messenger at 7.	7	1	7				
			1	Messenger at 6.	6	1	6				
			8	Total for each office.	270½	8	270½				
			24	Add similar Establishments for 3 more such offices.	811½	24	811½				
			32	Total Office Establishment, Project Divisions.	1,082	32	1,082				
				For 50 Sub-Divisional Offices.							
1	Clerk, IV Class, 3rd Grade	25	1	Clerk, IV Class, 3rd Grade	25					To the existing number (40) of Sub-Divisions have been added the 10 additional Sub-Divisions as follows :— For Sungum Project... ... ... 2; „ Madras Irrigation and Canal ... ... 2; „ Ganjam ... ... 2; „ Bellary ... ... 2; „ Madura ... ... 2; Total...10 And Office Establishment provided for each in accordance with the scale given in Appendix C. No. 10 to G. O. No. 3674 W. dated 18th September 1878.
1	Messenger	6	1	Messenger	6						
2	Total for one Office	31	2	Total for one Office	31						
78	Add similar Establishment for 39 more Sub-Division Offices	1,209	78	Add similar Establishment for 39 more Sub-Division Offices	1,209						
			20	Add similar Establishment for 10 additional Offices	310	20	310				
80	Total Sub-Divisional Office Establishment	1,240	100	Total Sub-Divisional Office Establishment	1,550	20	310				
				For 88 Detached Officers.							
1	Clerk Apprentice, 1st Grade, now called 5th Class, 1st Grade	17½	1	Clerk, IV Class, 3rd Grade	25		7½				
39	Add similar Establishment for 39 more detached Officers (Upper Subordinates above the grade of Overseer)	682½	39	Add similar Establishment for 39 more detached Officers	975		292½				

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Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				For 88 Detached Officers—(*Continued.*)							
			48	Add similar Establishment for 48 additional detached Officers, viz: Officers and Upper Subordinates above the rank of Overseer who are not in charge of Sub-Divisions	1,200	48	1,200				
40	Total Office Establishment, detached Officers	700	88	Total Office Establishment, detached Officers	2,200	48	1,500				
				For 92 Overseers.							
Nil.			1	Clerk, IV Class, 1st Grade.	17½	1	17½				A provision of one Clerk, V Class, 1st Grade, has been made for each Overseer.
			91	Add similar Establishment for 91 more Overseers.	1592½	91	1592½				
			92	Total Office Establishment for Overseers.	1610	92	1610				
				Office [Toll] Establishment, Buckingham Canal.							
72	Clerks, &c.	761	72	Clerks, &c.	761						
				Abstract of Office Establishment.							
32	Chief Engineer and Secretary to Govt., P. W. Department.	2,433½	32	Chief Engineer and Secretary to Govt., P. W. Department.	2,433½						
28	Lithographic Establishment.	925	28	Lithographic Establishment.	925						
27	Chief Engineer for Irrigation.	1,180	27	Chief Engineer for Irrigation.	1,180						
33	Superintending Engineer's Offices,	1,240½	72	Superintending Engineer's Offices.	2,631	39	1,390½				
8	Superintendent of Works, Presidency.	273	16	Presidency Division.	485½	8	212½				
16	Godavari and Kistna Eastern Divisions.	546	20	Godavari and Kistna Eastern Divisions.	646	4	100				
48	Six 1st Class Executive Divisions	1,638	63	Seven 1st Class Executive Divisions	2,086	15	448				
64	Eight 2nd Class Executive Divisions	2,024	72	Nine 2nd Class Executive Divisions	2,277	8	253				
16	Two 3rd Class Executive Divisions	441	40	Five 3rd Class Executive Divisions	1,102½	24	661½				
6	Consulting Architect's Office	270½	6	Consulting Architect's Office	270½	...	...				
9	Public Works Stores	305	9	Public Works Stores	305	...	...				
16	Office Establishment, Superintendent of Works, Godavari and Kistna	546	...	...	...	...	...	16	546		
..	...	...	32	Office Establishment, Project Divisions	1,082	32	1,082				
80	Sub-Divisional Offices	1,240	100	Sub-Divisional Offices	1,550	20	310				
40	Office Establishment, Detached Officers	700	88	Office Establishment Detached Officers	2,200	48	1,500				
...	...	...	92	Office Establishment, for Overseers	1,610	92	1,610				
72	Office (Toll) Establishment Buckingham Canal	761	72	Office (Toll) Establishment Buckingham Canal	761	..	...				
495	Total Office Establishment	14,523½	769	Total Office Establishment	21,545	290	7,567½	16	546		
				Irrigation Establishments.							
	Water Regulation	7,528		Water Regulation	7,528						
	Navigation	2,462		Navigation	2,462						
	River Conservancy	260		River Conservancy	260						
	Total Irrigation Establishment	10,250		Total Irrigation Establishment	10,250						
				Abstract of Executive Branch.							
69	Engineer Establishment	45,950	92	Engineer Establishment	60,600	23	14,650				
160	Upper Subordinate ...	19,830	201	Upper Subordinate ...	29,670	55	10,920	14	1,080		
20	Lower do ..	600	19	Lower do ...	580			1	20		
448	Petty Establishment...	3,242	538	Petty Establishment...	3,842	90	600				
495	Office do ...	14,523½	769	Office do ...	21,545	290	7,567½	16	546		
	Irrigation do ..	10,250		Irrigation do ...	10,250						
	Total Executive Branch	94,395½		Total Executive Branch	126,487		33,737½		1,646		

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Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				ACCOUNTS BRANCH.							
				Examiners.							
1	Examiner 3rd Class ...	1,100	1	Examiner 3rd Class ...	1,100						The number of officers at present attached to this Presidency has been taken as the "Present Scale," to which has been added, one to Deputy Examiner, 1st Grade, and the totals thus arrived at have been shown as the "Proposed Scale." The provision of the extra Deputy Examiner has been made in view to the more frequent inspection of the Executive Engineer's Officers, considered to be absolutely essential with the introduction of the new forms of account, and also in view to the proposed large increase to the operations of the Department.
1	Deputy Examiner 1st Grade.	550	2	Deputy Examiners 1st Grade at 550.	1,100	1	550				
1	Assistant Examiner 2nd Grade.	250	1	Assistant Examiner 2nd Grade.	250						
3	Total Examiner Establishment.	1,900	4	Total Examiner Establishment.	2,450	1	550				
				Accountants.							
1	Accountant 1st Grade	400	1	Accountant 1st Grade	400						The numbers entered in column "Proposed Scale" have been arrived at thus— For 25 Executive Divisions ... 25 Accountants For Central Office, one Accountant for every 3 Divisions, and one for any fraction $\frac{2}{3}$ or 9 Do Extra ... ... 1 Do Total ... 35 and this total has been distributed with reference to P.W.D. Code, Chap. I, Para 77, as follows :— 1st and 2nd Grades $\frac{2}{3}$ 4 (omitting fraction less than half) 2nd Grade to be always more than 1st Grade, *i.e.*, 1st Grade = 1 at 400 = 400 2nd Grade = 3 at 295 = 885 3rd Grade $\frac{2}{3}$ = 9 at 200 = 1800 4th Grade (remainder) = 22 at 115 = 2,530 (adding 1 for fraction more than half) Total...35 Costing Rs.5,615 Recasting the above to bring in the 5th Grade Accountants the Establishment will be— 1st Grade 1 at 400 = 400 2nd Do 3 at 295 = 885 3rd Do 6 at 200 = 1200 4th Do 13 at 115 = 1,495 5th Do 29 at 57½ = 1,667½ 52 Costing *5,647½
3	Accountants 2nd Grade at 295	885	3	Accountants 2nd Grade at 295	885						
4	Accountants 3rd Grade at 200	800	6	Accountants 3rd Grade at 200	1,200	2	400				
10	Accountants 4th Grade at 115	1,150	15	Accountants 4th Grade at 115	1,725	5	575				
34	Accountants 5th Grade at 57½	1,955	31	Accountants 5th Grade at 57½	1,782½			3	172½		
52	Total Accountant Establishment	5,190	56	Total Accountant Establishment	5,992½	7	975	3	172½	Net Increase Rs.802½	

* The small excess difference of Rs.32½ is due to the redistribution.

Add one Accountant each for Presidency and Dowlaishwaram Workshops, one for Madras Harbour Works and one for Central Office = 4 *i.e.* 2, 4th Grades at 115 = 230; 2, 5th do at 57½ = 115. Total ...56 Costing 5,992½

				Office Establishment.							
1	Clerk II Class 2nd Grade	140	1	Clerk II Class 2nd Grade	140						To the present number of Clerks have been added four Clerks (2, III Class, 2nd Grade at 70 each, and 2, III Class 3rd Grade at 55 each) on account of the four Project Divisions for which no Accountants have been provided. A small addition of two Clerks (1, IV Class, 1st Grade at 45, and 1, IV Class, 3rd Grade at 25) has also been made to the existing establishment on account of the increase in number from 20 to 25 of Executive Divisions, which necessarily will entail an increase in the clerical work of the Central Office.
1	Do III do 1st do...	90	1	Do III do 1st do...	90						
1	Do III do 2nd Grade at 70	70	3	Do III do 2nd Grade at 70 ab 55/11	210	2	140				
3	Clerk III do 3rd do...	165	5	Clerk III do 3rd do	275	2	110				
5	Do IV do 1st Grade at 45	225	6	Do IV do 1st Grade at 45	270	1	45				
6	Clerk IV do 2nd Grade at 35	210	6	Clerk IV do 2nd Grade at 35	210						
10	Clerk IV do 3rd Grade at 25	250	11	Clerk IV do 3rd Grade at 25	275	1	25				
3	Clerk V do 1st Grade at 17½	52½	3	Clerk V do 1st Grade at 17½	52½						
30	Total Clerks ...	1202½	36	Total Clerks ...	1,522½	6	320				
	Menial Servants ...	102½	1	Moochi at 10 ...	10						
			1	Do at 8 ...	8						
			1	Head Messenger ...	10						
			1	Head Messenger	8						
			4	Messengers at 7	28						
			6	Do. at 6	36						
			2	Rollers at 5	10						
			16		110	0	7½				
	Total Office Establishment.	1,305	52	Total Office Establishment.	1,632½		327½				
				Abstract of Accounts Branch.							
3	Examiners	1,900	4	Examiners	2,450	1	550		...		
52	Accountants	5,190	56	Accountants	5,992½	7	975	3	172½		
	Office Establishment	1,305	52	Office Establishment	1,632½		327½		...		
	Total Accounts Branch	8,395		Total Accounts Branch	10,075		1,852½		172½		

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ABSTRACT.

Executive Branch	1,26,487			
Accounts Branch	10,075			
Grand Total...	1,36,562	per mensem or per annum ...	Rs.	16,38,744
ADD.—Approximate amount on account of Military pay and allowances of Military Officers, per mensem ...	Rs. 8,000			
Approximate amount on account of Military pay and allowances of Military Subordinates, per mensem ...	,, 1,500	or per annum ...	Rs.	1,14,000
	,, 9,500			
Sub-Divisional Allowance for 15 Upper Subordinates at 30 ...	,, 450	or per annum ...	Rs.	5,400
Local allowances, approximate, Upper Godavari allowance per mensem ...	50			
Wynaad allowance per mensem ...	200			
Potinghy Ghat or Jeypore allowance per mensem ...	600			
	850		... Rs.	10,200
Charge allowance for Fifth Grade Accountants recommended in letter No. 241 W. dated 19th March 1881, from the Examiner P. W. Accountant to the Local Government ...	Rs. 400		... Rs.	4,800
Do do Presidency allowance, & Presidency house rent, Executive Branch ...	Rs. 1,200			
Accounts Branch ...	,, 1,650			
	2,850		... Rs.	34,200
		Total Permanent Establishment salaries...	Rs.	18,07,344
Travelling allowance Executive Branch* ...	Rs. 16,666⅔			
Accounts Branch ...	,, 400			
	,, 17,066⅔		,,	2,04,800
Contingencies.— Executive Branch ...	,, 4,000			
Accounts Branch ...	,, 400			
	,, 4,400		,,	52,800
		Total Permanent Establishment...	,,	20,64,944

*Per mensem to give in round numbers 2,00,000 for the year.

Temporary Establishment.

EXECUTIVE BRANCH.

	Per mensem. Rs.	Per annum. Rs.
Irrigation Survey	1,250	15,000
Special Revenue Investigation Establishment ...	1,000	12,000
Temporary Executive Branch ...	2,083½	25,000
	4,333½	52,000

ACCOUNTS BRANCH.

Temporary Establishment for the preparation of Capital & Revenue Accounts of Irrigation works.	800	9,600	
	5,133½	61,600	... Rs. 61,600
		Grand Total Establishment... ,,	21,26,544

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Grand Total Establishments. ... Rs. 21,26,544

EXECUTIVE BRANCH.

DEDUCT.

	Per mensem. Rs.	Per annum. Rs.	
Pay and allowances of Consulting Engineer and two Deputy Consulting Engineers for Railways chargeable to Imperial ...	4,023	48,276	
Moiety of pay and allowance of Superintendent P. W. Stores and Workshops chargeable to Workshops	335	4,020	
Pay of two Upper Subordinates chargeable to Workshops ...	400	4,800	
ACCOUNTS BRANCH.			
Pay and allowances of four Accountants chargeagble to P. W. workshops (Dowlaishvaram and Presidency) and Madras Harbour Works	445	5,340	
			62,436
Net Total Establishment Permanent and Temporary including Travelling allowances and contingencies			20,64,108

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APPENDIX C.

Gradation List as proposed under the new organization with effect from 1st August, 1881.

Name.	Date of first Appointment to the Department.	Present permanent grading in the Department of those officers who are to be promoted.
Chief Engineer, 1st Class, (1.)		
Col. R. H. Sankey C.B. R. E.	May 1850	
Chief Engineer, 2nd Class. (1.)		
Col. J. Mullins, R. E.	February 1852	
Chief Engineer, 3rd Class, (1.)		
Col. J. H. M. Shaw-Stewart, R.E., (A.I.C.E.)	January 1854	
Superintending Engineers, 1st Class, (2.)		
Lieut.-Col. J. Beatty, R. E.	March 1855	
" J. O. Hasted, R. E.	January 1856	
Superintending Engineers, 2nd Class, (2.)		
Lieut.-Col. H. L. Prendergast, R. E.	November 1857	
Lieut.-Col. W. Chrystie, R. E.	October 1855	Superintending Engr., 3rd Class
Superintending Engineers, 3rd Class, (2.)		
Major H. R. Mead, R. E.	January 1858	
Mr. J. W. Rundall, M.I.C.E.	August 1855	Executive Engineer, 1st Grade
Executive Engineers, 1st Grade, (9+1=10.)		
Major C. J. Smith, R. E.	January 1858	
Mr. R. F. Chisholm, F.R.I.B.A.	February 1859	
Lieut.-Col. J. N. Hunter, R. E.	March 1855	
Major H. Smalley, R. E.	July 1859	
" P. Montgomerie, R. E.	November 1860	
Lieut.-Col. W. H. Burton, R. E.	May 1858	
Major H. M. Vibart, R. E.	September, 1861	
" J. Pennycuick, R. E.	April 1862	
Lieut.-Col. Ross Thomson, R. E.	August 1863	
Major J. L. L. Morant, R. E.	January 1864	
Executive Engineers, 2nd Grade, (10+1=11.)		
Mr. G. T. Walch, M.I.C.E.	February 1866	
Major A. T. Fraser, R. E.	March 1860	
" S. C. Clarke, R. E.	October 1862	
Capt. R. R. E. Drake-Brockman, R. E.	November 1864	
" W. H. Coaker, R. E.	April 1866	
Mr. T. D. Harris.	August 1855	
Capt. A. C. Smith, R. E.	September 1864	
" A. Awdry, R. E., A.I.C.E.	January 1868	
Mr. K. F. Nordmann.	June 1862	
" E. H. Pringle.	January 1868	
Capt. D. McNeil Campbell, R. E.	April 1869	Executive Engineer, 3rd Grade
Executive Engineers, 3rd Grade, (10+1=11.)		
Mr. J. Hannan.	July 1866	
Mr. R. W. Norris.	July 1867	Reappointment
Captain R. F. Morris, R. E.	March 1864	
Mr. G. D. Wybrow.	July 1867	
" J. W. Martin.	December 1867	
" J. D. Grant, A.I.C.E.	July 1868	

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Name.	Date of first Appointment to the Department.	Present permanent grading in the Department of those officers who are to be promoted.
Executive Engineers, 3rd Grade,—*(Continued.)*		
Mr. C. J. Peters.	July 1867	Executive Engineer, 4th Grade
,, *W. Hughes, B.A.*	July 1868	Do
,, *J. C. Larminie.*	March 1869	Do
,, *J. M. Bell.*	December 1867	Do
Captain A. W. Smart, R. E.	March 1871	Do
Executive Engineers, 4th Grade, (3+1=4.)		
Captain C. C. Rawson, R. E.	June 1871	
Captain A. R. F. Dorward, R. E.	August 1871	
Mr. J. Grimes.	June 1861	Assistant Engineer, 1st Grade
Lieutenant G. B. Henderson, R. E.	April 1873	Do
Mr. Wilks.	...	Temporary Probationary Appointment
Assistant Engineers, 1st Grade, (24+2=26.)		
Lieutenant O. V. Boddy, R. E.	April 1873	
,, L. Langley, R. E.	April 1873	
,, F. G. Romilly, R. E.	April 1873	
Captain W. Jackson.	September 1872	Counted as an Upper Subordinate
Mr. C. H. T. Norfor.	August 1870	
Lieutenant R. E. Hamilton, R. E.	June 1875	Dy. Cong. Engr. for Railways
,, W. L. C. Baddeley, R. E.	July 1875	
Mr. W. B. De Winton.	October 1874	
Lieutenant S. C. Plummer.	January 1855	Counted as an Upper Subordinate
Mr. C. Vincent.	October 1874	
,, A. H. Garrett.	October 1874	
,, J. P. Davidson.	October 1874	
,, J. C. Johnson.	February 1873	
,, H. S. Taylor.	October 1875	
,, A. S. Russell.	October 1875	
,, C. M. Smith.	October 1875	
S. Subroya Chariur, B.C.E.	May 1865	
Mr. W. C. De Morgan.	October 1874	Assistant Engineer, 2nd Grade
,, *W. L. Bird.*	October 1875	Do
,, *J. E. Paul.*	October 1875	Do
,, *G. P. Carless.*	February 1876	Do
,, *J. Trail.*	October 1874	Do
,, *C. H. B. Burlton.*	October 1875	Do
,, *H. E. G. Evans.*	October 1875	Do
,, *C. . Ussher.*	October 1877	Do
,, *G. E. Manson.*	October 1877	Do
,, *A. A. G. Malet.*	October 1877	Do
,, *W. Jopp.*	October 1877	Do
Assistant Engineers, 2nd and 3rd Grades, (19+2=21.)		
Mr. B. H. Young,	October 1877	
,, G. B. Lambert.	October 1877	
,, H. H. O'Connell.	September 1878	
,, A. R. Boyle.	October 1880	
,, A. M. Hayes.	October 1880	
,, F. J. Wilson.	October 1880	
,, E. B. Hanson.	October 1880	
,, A. M. Foord.	September 1879	
,, R. H. Dorman.	October 1880	
,, H. E. Clerk.	October 1880	
,, S. D. Pears.	October 1880	
N. Ruthnasubapathy Pillay, B.C.E.	April 1874	
S. Gopalakrishna Iyengar, B.C.E.	September 1880	
Lieutenant D. Falvey.	July 1870	Counted as an Upper Subordinate

N. B.—Those officers shown in italics will receive promotion.

APPENDIX D.

Protective Works Projects now in hand or proposed, para 8 Government of India Letter, No. 681 G, dated 5th May, 1881.

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	1883-84.
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
(*a.*) Ganjam, Gopaulpore, tidal Canal.	A Project Division 1st Circle.	During the last famine a tidal canal 9 miles in length, was completed from Ramba at south end of the Chilka Lake to Ganjam, thus with the system of Canals to the North connecting the latter place with Cuttack, Midnapur ,&c. It is now absolutely essential that this Canal should be extended southwards about 12 miles to the port of Gopaulpore, the most important emporium of the district, thus securing the means of distributing food grains in case of famine and of creating for ordinary seasons a highly promissing artery of trade. A detailed estimate for a high level fresh water canal, amounting to Rs.1,72,000 was framed some years since, but late information appearing to show that a tidal canal will be preferable, arrangements are being made for completing the estimate, which should be ready for submission in six or eight months.	2·10	Nil.	Nil.	1·00
(*b.*) Road from Salur in the Vizagapatam Division, *via Potinghy Ghaut* to Koraputt and Jugdulpore in Bustar.	Do.	The primary link in this, the first cart road leading from the littoral of Vizagapatam to, and through the country above the ghauts in Jeypore and Bustar, as yet attempted to be made, is the "Potinghy Ghaut," on which such small sums (altogether inadequate however for securing proper progress) have hitherto been spent from Provincial funds as could be spared. While grain has been at famine prices in the low country, it has always been cheap above the ghauts, where the rainfall seems to be abundant and certain, and where land is apparently to be obtained for emigrants, the country being but sparsely populated. Of the revised estimate amounting to 3·40 Lakhs for the Potinghy Ghaut now under examination (which will, if necessary, be forwarded to the Government of India) about one-third has already been spent, and it is thought that probably nine lakhs more would be needed to take the line 70 miles on to Jugdulpore (new Bustar). No estimate has been framed for this latter portion, but with the new establishment, one should be ready a year hence in time for entry in the Budget of 1883-84.	10·50	0·75	1·00	2·00
		N. B.—Other roads suitable for cart traffic, *e.g.*, for linking Koraputt with Raigurh and others leading towards Sumbalpore north-east and through Kalahandy north-west will be certainly required in course of time as protective works, but need not be further adverted to here.				
(*c.*) Buckingham Canal.	At present Buckingham Canal Division. 1st Circle.	From the early part of the century, a tidal canal connecting the backwaters of the east coast north of Madras was considered feasible and partially carried out. The scheme was more fully developed in the late famine by so far completing the works as to				

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Protective Works Projects now in hand or proposed, para 8, Government of India Letter, No. 681G, dated 5th May, 1881.
—*(Continued)*

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	18838-4.
			Lakhs	*Lakhs*	*Lakhs*	*Lakhs*
(*d.*) Buckingham Canal South of Markanum.		make a tidal communication now known as the "Buckingham Canal," extending nearly 200 miles north, and about 50 South of Madras. The total outlay from the commencement to date has been nearly 37·4 lakhs, of which 27·1 lakhs may be considered normal. The completion estimates now far advanced amount to about 29 lakhs, so that the normal outlay will, for the finished work be approximately, 56 lakhs. For the distribution of food grain during famine a safe interior line of coastal communication will be invaluable, while for ordinary trade purposes, its importance is daily on the increase. Already boats from Coconada come laden to Madras 400 miles, and it can hardly be doubted that eventually the whole line of coast will be similarly connected. A work of this character is wholly beyond the unaided Provincial resources, and as it is essentially "Protective" in its character, it is here included. The estimates should be ready for submission six months hence.	56·00	* Nil.	5·00	5·00
(*e.*) Baroor Tank.	B Project Division. 2nd Circle.	The extension southward of the above canal through the French territory (18 miles) and as far as Point Calimere has been regarded not merely as desirable for completing a much needed link in the coast communications, but as holding in readiness a work which is considered to be extremely well suited for execution during famine. The details of a considerable portion of the estimate were worked out some years ago, but its entire revision will be needed to allow of its being sanctioned by the Government of India. At the present moment, however, there is no very pressing necessity for the work, the time named for its submission may be for the Budget of 1884-85.	30·00	Nil.	Nil.	Nil.
(*f.*) Marandahully.	Do.	This work was commenced for Relief in last Famine. The project provides for an anicut across the Pooniar river, supply channel to Sarur Taluq, enlargement of the tank irrigation channels and head sluices to existing channels. The increase of cultivation is expected to be 5,610 acres, and of revenue, 22,137 rupees. The work is considered valuable as a famine protective work. Plans and estimates have been prepared and submitted to the Government of India, but were returned for revision. They will probably be resubmitted by the end of official year.	3·10	Nil.	1·00	2·00
(*g.*) Vaniar.	Do.	Work was commenced for Famine Relief. The project provides for an anicut across Sumadakumara river, supply channel to Sungambasavan tank enlarging this and Jairy Talab, and channels from tanks. Provides for the storage of 667 millions of cubic feet of water. Increase of cultivation and revenue expected not yet known. It is understood that estimates are nearly ready for submission. This work is likely to be of value as a protective work.	3·90	Nil.	1·50	2·00
(*h.*) Hindupur.	C Do. 3rd Circle.	Work was commenced for Famine Relief, but probably the project cannot be carried out so as to utilize all the work then done. The project provides for the formation of a reservoir by damming the valley of the Vaniar river. Increase of cultivation expected is 9,500 acres, and of revenue 33,250 rupees. Plans and estimates have yet to be drawn up, and further enquiry made regarding the returns. It is not certain that the work will prove productive though it may be valuable as a protective work. The estimates might be ready by the end of the official year. ...	8·50	Nil.	Nil.	Nil.
(*i.*) Roddam.	Project Division. 3rd Circle.	The project provides for constructing an anicut across the Penniar River for the supply of 11 tanks with head sluices and channels. The district of Bellary having very little irrigation, the work would be of value as a protective work. Plans and estimates were prepared many years ago, but the project will need complete revision. Existing cultivation is expected to be improved, and 356 acres of waste land cultivated. Increased revenue expected, 10,906 rupees. Estimates may be submitted by the end of official year.	2·00	Nil.	1·50	0·50
(*j.*) Complete revised project for the Godavari Delta Works.	D Do	The project provides for an anicut across the Pennair to supply Roddam large tank, and would, like the work above, be useful as a protective work. Plans and estimates were prepared many years ago, but the project needs complete revision. Existing cultivation is expected to be improved, and 1,344 acres of waste land cultivated. Increased revenue expected 9,105 rupees. Estimates may be submitted by the end of the official year.	1·40	Nil.	Nil.	1·00
(*k.*) Complete revised project for the Kistna Delta Works.	Do	The work to be done is the revision of certain of the estimates already sanctioned, the examination of estimates submitted, and framing one complete estimate. Beyond those already submitted, there will probably be estimates amounting to 24,00,000 rupees required. It is thought that under special arrangements now being made the estimates will be ready for submission in five or six months.... ...	60·00	Nil.	5·00	5·00
(*l.*) Perryaur.	Do	The same work has to be done as above. Estimates have been prepared and but little revision is expected to be necessary. Revenue returns have to be obtained. These estimates may be expected to be ready for submission by the end of the year or a little after	140·00	Nil.	5·00	5·00
(*m.*) Poogalur Channel.	Do	The project provides for constructing a concrete dam of 170 feet in height and turning the water of the Perryaur river, which now runs into Travancore, into the Madura District. It will it is thought prove invaluable as a protective work. The net return expected from the work is 5,15,000 rupees per annum constituting it also a "Productive." The out-door surveying &c., has been done, and the project has only to be put into shape and may be submitted by the end of the year. ...	70·00	Nil.	1·00	5·00
		The project provides for improving an existing channel, and work was commenced for Famine Relief, 95,057 rupees having been spent on it. The existing irrigation is expected to be improved, and 5,100 acres additional land cultivated; the increase of revenue expected is 48,000 rupees. The estimates have				

* N.B.—No outlay is shown in 1881-82 against the Buckingham Canal above, as the funds for the current year are being found for "Provincial." At the same time it is much to be desired that a portion if not the whole of the current years assignment may be charged against "Imperial Protective" so as to liberate Provincial Funds most urgently needed for other purposes.

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Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82	1882-83	1883-84
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
		been submitted and returned for revision, and may probably be ready by the end of the year.				
(*n.*) Rooshkoolia.	D Project Division. 3rd Circle.	The project provides for an anicut across the Korakory river in the Ganjam District, improving and constructing channels and embanking a natural lagoon in a part of the country where protective works are much needed. Provision is made for 64 miles of navigable canal and for two reservoirs. The area to be irrigated is 1,20,000 acres, and a return of 4 per cent. on the total outlay is expected. The plans and estimates have been prepared, and may be put into shape for submission without delay	3·70	Nil.	1·00	2·00
(*o.*) Palar Anicut.	Unassigned as yet.	The project is for improvements to existing channels under the anicut on the South side. Plans and estimates have been prepared, but not yet submitted, and information is needed as to cultivation and revenue expected.	26·00	Nil.	2·00	2·50
(*p.*) Atur Anicut.	Do.	This project provides for an anicut on the Guddebum in South Arcot District. The estimate has been submitted and returned for revision. Information regarding cultivation, &c., is as yet not available. The estimates might be completed in three or four months.	2·50	Nil.	Nil.	Nil.
(*q.*) Lower Coleroon Anicut.	Do.	This project provides for the improvement of existing irrigation under the Lower Coleroon Anicut in South Arcot; the subject has not yet been taken up, but it seems certain that great improvements can be made, and the cultivation extended. The estimates could be prepared within a year.	0·54	Nil.	Nil.	Nil.
(*r.*) Bhawani Reservoir	Do.	This is a project for forming a large reservior on one of the tributaries of the Cavari river with a view to storing some portion of the flood waters which now runs to waste, Preliminary investigations have been made, and it is thought that by the construction of the reservior, not only would the supply for the Tanjore Delta be thus improved, when occasionally deficient, but over 300,000 acres of additional direct irrigation be secured.	6·50	Nil.	Nil.	Nil.
			40·00	Nil.	Nil.	Nil.
		TOTALS ...	425·84	0·75	25·00	35·00

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

14th July 1881, No. 1,729 W.

General.
Establishment.

Read the following papers:—

No. 17. From A. B. SAMPSON, Esq., Under Secretary to the Government of India, Public Works Department, (General,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 5th May 1881, No. 681 G.

I AM directed to acknowledge your letter, No. 337 W., dated 8th February 1881, again recommending for sanction the establishment proposed in your previous letter, No. 2,277 W., dated 1st October 1880.

2. The total amount of all establishment charges under those proposals is estimated at 18½ lakhs against a total grant for the year 1881-82 of 63½ lakhs, or excluding the Madras Harbour Works of 56½ lakhs.

3. The Government of India still retains the objections that the appointment of five Superintendents of Works, each drawing Rs. 100 per mensem as a special allowance, would make the normal pay of Executive Engineer, 1st Grade, quite exceptional, and that some of the charges do not appear to be of sufficient importance to justify the appointment of a special supervising officer; I am to suggest, for the consideration of the Madras Government, the following alternative. Instead of a Superintendent of Works for each of the four circles—

1. Vizagapatam and Ganjam,
2. the Godávari Delta,
3. the Kistna Delta,
4. the Buckingham Canal,

it is proposed for consideration that there might be two circles each under a Superintending Engineer, viz.:—

1. Vizagapatam, Ganjam, and the Godávari Delta;
2. the Buckingham Canal and the Kistna Delta,

each circle consisting of three executive divisions.

4. The objections to linking the Buckingham Canal to any other circle of superintendence are stated to be its great length (250 miles) and unfinished condition, and also the work involved in controlling the traffic arrangements over so great a length of channel. The details of traffic arrangements should, however, devolve on the Executive Engineer, only a general control being exercised by the Superintending Engineer. As to the extent of the superintendency, it is not nearly so great as the Scinde Circle in Bombay, which is controlled by one Superintending Engineer.

5. If the foregoing suggestion is adopted, the following figures would show the difference between the resulting staff and that proposed by the Madras Government:—

	Proposed by the Madras Government.	Suggested by Government of India.
Chief Engineers	2	2
Superintending Engineers	5	7
Executive and Assistant Engineers	*79	†75

* Including five Superintendents of Works.

† Including one Superintendent of Works.

The expense would be somewhat less on the latter scale.

6. The distribution of Executive and Assistant Engineers into classes and grades would be—

	As proposed by Madras Government.	As suggested by the Government of India.
Executive Engineer, Grade 1	8	9
Do. do. 2	10	10
Do. do. 3	11	3
Do. do. 4	5	24
Assistant Engineer, Grade 1	25	19
Do. do. 2, &c.	20	

The Government of India is prepared to give provisional sanction to either of the schemes, expressing, however, a strong preference for the latter. The number of Upper Subordinates proposed is accepted.

7. It is observed that ten Executive and Assistant Engineers are intended exclusively for the preparation of projects for famine relief works, and it is assumed that some portion of the time of the regular divisional staff will also be so occupied. It appears fair to estimate that nearly one-eighth of the whole energies of the staff will be devoted for some time to this object. Under these circumstances the Government of India is prepared to contribute that proportion of the estimated cost of the Madras establishment charges, *i.e.*, 2½ lakhs, from the general grant for Protective Public Works.

8. The assignment of this contribution from the special grant for Protective Public Works makes it necessary that the Government of India should be kept informed of the objects on which it is expended. I am to request therefore that a list of projects of protective works now under preparation and of those it is proposed to prepare during 1881-82 may be submitted at once with a brief explanation of each, and that when the budget estimate for 1882-83 is submitted a brief indication may be given of the progress made on each and a further list submitted of the new projects, the preparation of which will be commenced during that year.

9. The cost of the establishment required for the normal operations of the department may therefore be taken at‡ 16 lakhs against a total grant of 61 lakhs. Of the latter sum, 7 lakhs appertains to the Madras Harbour Works, which are carried out by special establishment, leaving 54 lakhs for the normal public works. The relative cost therefore of works and establishment will be—

‡ 18¼ — 2¼.

	LAKHS.
Works	38
Establishment charges	16

i.e., the establishment charges are 42 per cent. on the outlay on works. This is still an extremely high percentage.

10. A large proportion of the establishment, however, appears to be required for the supervision of the distribution of water for irrigation and other revenue purposes. In paragraph 27 of your letter now acknowledged it is stated that it is the intention of the Government of Madras to address the Government of India, on the subject of debiting a portion of the Public Works Establishment to Revenue, in a separate communication. I am to state that the Governor-General in Council will be glad to receive the views of the Government of Madras on this point.

11. In sanctioning this large addition to the sanctioned scale of Engineers, it is necessary to consider the question of filling up the vacancies in it. The Government of India has no wish to retard promotion in Madras as compared with other provinces, but it is obvious that to fill up the vacancies in the higher grades altogether from the lower grades of the staff now in Madras would lead to inordinately rapid promotion. Moreover it is likely that the Government of India will very shortly have Engineers thrown on its hands without employ owing to completion of works in the railway branch. Before, then, working up to the new scale, I am to request that a nominal roll may be submitted of the Engineers as they now stand, and a statement of the promotions the Madras Government considers due to length and nature of service, and an endeavour will be made to supply the balance from [illegible]

12. I am to request that the exceptional arrangement regarding promotions in the place of Superintending Engineers on furlough may cease on the receipt of this letter.

13. The increase now sanctioned to the number of Upper Subordinates will probably enable the Madras Government to find room for those transferred from Madras to Mysore and for men whose home is in Madras who are no longer needed in Mysore, owing to the transfer of the administration of the country to His Highness the Maharajah.

14. I am finally to request that it may be understood that the Government of India cannot admit a higher rate than 25 per cent. on the expenditure on Imperial works as a charge for Imperial establishments exclusive of the establishment employed on Revenue work; that is, one-fifth of the entire Imperial grant shall not be exceeded on account of establishment charges exclusive of what is charged to Revenue work.

No. 17-A. To the Government of India, dated 9th July 1881, No. 1,697 W.

No. 18. ORDER THEREON, 14th July 1881, No. 1,729 W.

THE scale and general arrangement into six Superintending Engineers' Circles sanctioned by the Government of India in the letter above printed have been accepted by the Honorable the Governor in Council.

2. For the reasons explained in the letter to the Government of India, No. 1,697 W., dated 9th July 1881, the following should be added to the scale thus sanctioned:—

Executive Engineers	4
Assistant do.	4
Upper Subordinates	12

3. The modified normal establishment will then stand as follows:—

Chief Engineers.	
First class	1
Second class	1
Third class	1
	*3
Superintending Engineers.	
First class	2
Second class	2
Third class	2
	†6
Executive Engineers.	
First grade	10
Second grade	11
Third grade	11
Fourth grade	4
	36
Assistant Engineers.	
First grade	26
Second and third grades	21
	47
Upper Subordinates of all grades	185

* Includes one Chief Engineer with personal rank. † Excludes one for the excess in Chief Engineer's class.

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4. The circles, divisions and sub-divisions with the scale of executive establishment allotted thereto are shown in Appendix A attached to these Proceedings, and the financial result of the new organization with the classes of divisions and details of upper subordinate, lower subordinate, petty, and office establishments, are exhibited in Appendix B.

5. Protective works projects now in hand or proposed under paragraph 8 of the letter from the Government of India are shown in Appendix D, which is circulated for information and guidance.

6. Appendix C (not circulated) contains proposals specially referred to the Government of India.

7. Should the final orders of the Government of India be received in time, the new arrangements will, as regards sanctioned scale, come into force with effect from the 1st August, and the redistribution of executive charges will be carried out as soon after that date as practicable.

8. The proposal of the Government of India (paragraph 7) to contribute towards the cost of establishment a sum of $2\frac{1}{2}$ lakhs from the general grant for Protective Public Works, as also the question (paragraph 10) of debiting a portion of the charge for Irrigation Establishment against the revenue of the works on which they are engaged are under discussion in separate proceedings.

9. The subject matter of paragraph 11 of the Government of India letter in regard to filling up the vacancies in the new scale is also being separately considered and discussed.

10. As regards the agency by which the larger class of Local Fund projects is to be supervised, the Government have intimated their readiness to accept the arrangement suggested in paragraph 5 of the letter from the Government of India, No. 1,639 G., dated 17th September 1880, by which, in return for a general contribution on the part of Local Fund Boards of Rs. 21,250 per annum, the Public Works Department would undertake the duties in question without, however, making any personal allowances to the officers to whom such duties may be assigned. The special allowance hitherto paid will therefore cease on the revised arrangements coming into force.

(True Extract.)

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

To Superintending Engineers.
" Superintendents of Works.
To the Consulting Architect to Government.
" General Superintendent of Public Works Stores.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Consulting Engineer for Railways.
" Financial, &c., Departments.
" Revenue Department.
" Military Department.

Exd E. C. Shunker.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

SUPERINTENDING ENGINEERS,

&c. &c. &c.

Dated July, 14th.

Instd

Encl.

G. O., 14th July 1881, No. 1,729 W.

JULY.

Nos. 17-18.

RE-ORGANIZATION of the Public Works Department of the Madras Presidency.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

8th October 1881, No. 2472 W.

General.
Establishment.

Read the following paper :—

No. 31. From A. B. SAMPSON, Esq., Under Secretary to the Government of India, Public Works Department (General), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 23rd September 1881, No. 1250 G.

I AM directed to acknowledge your letter, No. 1697 W., dated 9th July last, relative to the normal strength of the Establishment of the Public Works Department in Madras and other subjects.

2. The Governor-General in Council desires me to point out that the despatch of business is much impeded by the treatment of more than one subject in the same letter, as in the case of your letter under reply. The present communication will be confined to the one subject of the strength of Establishment.

3. In Public Works Department letter, No. 681 G., dated 5th May, the Government of India accepted the following :—

2 Chief Engineers.
7 Superintending Engineers.
75 Executive and Assistant Engineers.

One of the Superintending Engineers holds the rank of Chief Engineer till the post of Consulting Engineer for Guaranteed Railways is vacated, and one of the First-grade Executive Engineers, the Consulting Architect, is a Superintendent of Works on the special pay of Rs. 1,200 per mensem until the present incumbent vacates the post.

4. It is now pointed out that by oversight the former tables contained only one Executive Engineer on account of the 10 per cent. for absentees, instead of three, and two more Engineers are asked for on this account. Also the transfer to Government of the works of the Madras Irrigation Company involves an increase of three Executive and Assistant Engineers. This was approved in Public Works Department letter, No. 207 I., dated 16th May 1881.

5. Further, the execution of the Sungum Project will, it is said, necessitate an addition of three Executive and Assistant Engineers. So that it is proposed to increase the number of Executive and Assistant Engineers from 75, the number the Government of India declared itself prepared to accept, to 83, and the estimated cost of Establishment charges is put down at Rs. 20,64,000, exclusive of the establishment of the Consulting Engineer for Guaranteed Railways.

6. Though the Government of India is not able to accept these proposals as economical, yet, in consideration of the representations of the Government of Madras, and with the view of settling a question which has been more or less under discussion for many years, the Governor-General in Council is pleased to sanction them provisionally, subject to the approval of the Secretary of State, who has lately taken occasion to remark on the apparent extravagance of this class of expenditure in Madras. But I am directed, in conveying these orders, to state that the strength of the Engineer Establishment now sanctioned must be regarded as the maximum, and that provision for the superintendence of any works that may hereafter be taken in hand must be made without any increase of the present staff.

7. The division of the staff into classes and grades given in paragraph 7 of your letter is correct, except that the number of Assistant Engineers in the first and second grades may be 27 and 20 respectively.

8. The proposed number of Upper Subordinates, 185, is accepted.

9. With reference to paragraph 18 of your letter, I am to state that the assignment of 2½ lakhs from the fund for Protective Public Works was for the purpose of providing establishment for the preparation of projects for such works, and cannot be reappropriated to Works without the special sanction of the Government of India, on the submission of a completed project; and even as regards this, no pledge can be given.

10. Other subjects of your letter will be dealt with separately.

No. 32. ORDER THEREON, 8th October 1881, No. 2472 W.

COMMUNICATED to the officers concerned in continuation of G.O., No. 1729 W., dated 14th July 1881.

2. The Government of India will be separately addressed in regard to the alleged excessive charge for Establishment (paragraph 6 of their letter).

3. With reference to paragraph 9, the Superintending Engineer, First Circle, will expedite the submission of the complete estimates for the Potinghy Ghát, which were returned for final revision, and meanwhile the precise effect of the sanction accorded of 2½ lakhs additional for Establishment as a grant-in-aid from Imperial will be considered by the Chief Engineer, Public Works Department, and the Examiner.

(True Extract.)

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

To the Chief Engineer, Public Works Department.
„ Superintending Engineers.
„ Superintendents of Works.
„ the Consulting Architect to Government.
„ the General Superintendent, Public Works Stores.
„ the Chief Engineer for Irrigation.
„ the Examiner of Public Works Accounts.
„ the Consulting Engineer for Railways.
„ the Financial Department.

Exd. A. F. Goodall.
Spare Copies

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GENERAL.
ESTABLISHMENT.

Govt. of (1881) Madras.

PUBLIC WORKS.

To

THE CHIEF ENGINEER, PUBLIC WORKS DEPARTMENT,

&c., &c., &c.

Dated October, 8th.

Issued

Encl.

Recd.

G. O., 8th October 1881, No. 2472 W.

OCTOBER.

Nos. 31-33.

Revised Scale of Establishment for the Public Works Department of the Madras Presidency.—Sanction of the Government of India to the —, communicated to the officers concerned.

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PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 2473 W.

No. 33.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—With reference to the observations contained in paragraph 6 of your letter, No. 1,250 G., dated 23rd ultimo, as to the uneconomical character of the establishment now provisionally sanctioned, and your allusion to the remark of the Secretary of State as to the apparent extravagance of the one which it is intended to replace, I am desired to invite a reference to the despatch of this Government marginally quoted, from which it will be observed that the percentage of 84·4, to which His Lordship not unnaturally took exception, did not agree with the figures given in the Public Works Budgets of this Presidency, and was therefore based on a misapprehension.

No. 41, dated 16th July 1881.

2. Convinced as this Government is that the opinion still held by the Government of India as to the uneconomical character of the establishment lately sanctioned is equally based on a misapprehension of the facts, they would now, in the hopes of ending a long and undesirable controversy, suggest that if the Government of India think fit a review of all the charges involved may be undertaken.

3. The charges shown in the Public Works Accounts in Upper India on Capital Revenue Works are believed to be arbitrarily confined to 25 per cent. for Establishment, and that no less than 16 per cent. on an average is debited to Revenue, whereas in this Presidency no charge of any kind for Public Works purposes is made against the latter. All comparisons, therefore, of the relative cost of establishment with the present incidence of the charges are thus necessarily fallacious and misleading.

4. It is held by this Government that if accurate figures could be given for all similarly situated Productive Works in other Provinces under the following heads, the economical administration of those in Madras would be established beyond fear of controversy :—

I.—Charges for Civil Administration under—

(*a*) Law and Justice ;
(*b*) Revenue.

II.—Charges in the Public Works Department under—

(*a*) Establishment—

(1) as debited to the Works;
(2) as debited against Revenue.

III.—Revenue of the Works under all heads.

IV.—Areas—

(*a*) commanded by the Works;
(*b*) actually irrigated.

V.—Population.

5. The figures could probably be given for eight or ten late years excluding, of course, any very exceptional ones.

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,
8th October 1881.

Exd. A. F. Goodall.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of [1881] Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated October, 8th.

Issued

Recd. *Encl.*

G. O., 8th October 1881, No. 2473 W.

OCTOBER.
No. 33.

EXPLANATION of the excessive nature of the Establishment charges in the Madras Presidency.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

23rd November 1881, No. 2922 W.

General.
Establishment.

Read the following paper: —

No. 102-A. From D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 4th November 1881, No. 156 W.

I HAVE the honor to forward herewith a statement showing Establishment charges audited under all heads to end of September 1881, *i.e.*, for the first six months of the current official year.

2. Taking the average of the six months as the total anticipated audits for the seventh month, and the average of the total of Rs. 20,64,000, which represents the cost per annum of the revised scale of establishment for this Presidency sanctioned by the Government of India in letter No. 1250 G., dated 23rd September 1881, as the monthly probable audits during the last five months of the year, the charges during 1881-82 for the entire Public Works Department will amount to about Rs. 17,55,000 as follows :—

	Rs.
Audits for first six months as per statement	7,67,158
Anticipated for the seventh month, one-sixth of Rs. 7,67,158 ...	1,27,859
Probable charges for the last five months. Average of cost of revised scale of Public Works Department Establishment which came into force from 1st October 1881, viz., five-twelfths of Rs. 20,64,000.	8,00,000
Total ...	17,55,017

3. The budget grants under all funds, as modified to end of October 1881, stand as under, viz. :—

	Rs.
Imperial Irrigation	7,07,818
Provincial do.	65,000
Imperial, Military and Other Services	1,58,432
Provincial	6,62,840
Local, Incorporated	66,455
Do. Excluded	13,084
Total ...	16,73,629

To this total may be added five-twelfths of the 2½ lakhs per annum promised by Government of India in paragraph 7 of letter No. 681 G., dated 5th May 1881, which will give a grand total of Rs. 17,77,795, and will more than sufficiently cover the total anticipated charges of the year given in the preceding paragraph.

4. From paragraph 9 of Government of India letter of the 23rd September 1881, printed with G.O., No. 2472 W., dated 8th October last, it would appear that no definite assignment of any portion of the 2½ lakhs for the current year has yet been sanctioned, and specific orders will therefore have to be obtained at once in regard to the addition of five-twelfths of this amount, viz., Rs. 1,04,166.

5. If this addition of Rs. 1,04,166 is sanctioned by the Government of India from the general grant for Protective Public Works, there will probably be a saving of about Rs. 20,000* under Establishment, and this sum can be re-appropriated for other purposes; otherwise a re-appropriation of about Rs. 80,000† to establishment will be necessary to cover the anticipated excess over the total of the grants as they stand at present.

		Rs.
* Grants, paragraph 3	... ...	17,77,795
Charges, „ 2	... ...	17,55,017
		22,778
† Charges, paragraph 2	... ...	17,55,017
Grants, „ 3	... ...	16,73,629
		81,388

6. Soliciting early orders.

No. 966 N.

OFFICE NOTE.

YOUR letter No. 156 W., dated 4th November 1881.

It is assumed in this letter that the expenditure during the last five months of the official year will be Rs. 8·60 lakhs, being five-twelfths of Rs. 20·64 lakhs, the gross sanction. Seeing that we are not working up to the new scale, the expenditure will not be so great as you assume. Please let me know the corrections which should be made in your figures, taking existing establishment (permanent) as the basis up to the end of the official year.

2. Allowance must of course be made for the Coopers' Hill Engineers expected to join.

7th November 1881. (Signed) R. H. SANKEY, Col., R.E.,
Chief Engineer, P.W.D.

No. 832.

TAKING the *permanent* establishment (Engineer and Upper Subordinate) as they stand on this date as the basis of calculating the charges for the last five months of this year, the figures given in my letter, No. 156 W., dated 4th November 1881, will be reduced by about Rs. 60,000, but this reduction can only be taken into account if it is quite certain that none of the officers at present absent on furlough will return to duty, and that no further promotions in the Engineer and Upper Subordinate Establishments will take place during current year.

2. Complete information in regard to office establishment generally, as also in regard to the Special Survey Establishment for the four project divisions, has not yet been received in this office, and therefore actuals have not been taken so far as these establishments are concerned.

17th November 1881. (Signed) D. C. GORDON,
Examiner of Public Works Accounts.

No. 102-B. ORDER THEREON, 23rd November 1881, No. 2921 W.

IT is observed from the papers above recorded that the probable charges for Establishment for the current official year will amount to Rs. 16,95,017, while the contributions to Provincial will (including five-twelfths of 2½ lakhs or Rs. 1,04,166 on account of Protective Works) amount to Rs. 11,14,955, leaving Rs. 5,80,062 to be met

from the Provincial Budget. The actual provision is, however, Rs. 6,62,840. There is thus an excess provision of Rs. 82,778. It is proposed, with the approval of the Government of India, to at once re-appropriate Rs. 60,000 of this amount to *works*, leaving a margin of Rs. 22,000 to meet such excesses as may arise during the remaining portion of the official year.

2. It is very desirable that early orders should be communicated to admit of the money being utilised, and the Government of India will accordingly be requested to intimate their approval by telegraph.

3. The exact financial position cannot, however, be stated until the final orders of the Government of India have been received on the question now before them in regard to the incidence of the cost of Irrigation Establishments employed on revenue work.

(True Extract.)

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

To the Examiner of Public Works Accounts.

No. 102-C. (DOCKET No. 2922 W., dated 23rd November 1881.)

COPY of the above forwarded to the Government of India.

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

Exd. E. C. Shunker.
Spare Copies

GENERAL
ESTABLISHMENT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE GOVERNMENT
of INDIA.

Dated November, 23rd.

Issued

Recd. *Encl.*

G.O., 23rd November 1881, No. 2922 W.

NOVEMBER.

Nos. 102-A—102-C

REQUESTING approval, by telegraph, for re-appropriating to works the sums of Rs. 60,000 from the excess provision in the Provincial Budget for 1881-82 for establishment.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

11th January 1882, No. 87 W.

General.
Account.

Read the following paper :—

No. 39. From Colonel W. S. TREVOR, R.E., Deputy Secretary to the Government of India, Public Works Department, (Account—General,) to the Secretary to the Government of Madras, Public Works Department, dated Fort William, 22nd December 1881, No. 473 A.—G.

I AM directed to acknowledge receipt of your No. 2922 W., dated 23rd ultimo, requesting the approval of the Government of India to the re-appropriation to Works of the sum of Rs. 60,000 from the excess provision in the Provincial Budget Estimate for 1881-82 for Establishment.

2. In reply I am to say that the Government of India cannot approve of the proposed appropriation unless it can be clearly shown that the entire grant of 2½ lakhs proposed to be assigned under 31 Famine Relief Protective Public Works can be wholly utilized on the specific object which that grant is intended to meet. The Government of India is aware that a grant of Rs. 2½ lakhs from Protective Public Works money was promised in Public Works Department No. 681 G., dated 5th May 1881, but on a reconsideration of this question it has been determined that the grant can only be given to meet such outlay as can be shown to be distinctly due to or connected with Protective Public Works. A general grant under this head without any restrictions as to how it is to be expended cannot be assigned.

3. The only outlay in Madras that can be legitimately charged to Protective Public Works at present is such outlay as may be actually incurred on or in connection with the preparation of projects likely to be classed as Protective Public Works. I am therefore directed to request that the Government of India may be furnished with a report showing what this outlay is likely to amount to and how the amount is arrived at. On receipt of this information orders will be passed sanctioning the necessary allotment from Protective Public Works Funds.

No. 40. ORDER THEREON, 11th January 1882, No. 87 W.

ORDERED that the following reply be sent :—

(Here enter No. 88 W., dated 11th January 1882.)

(True Extract.)

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

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Gobt. of {1882} Madras.

PUBLIC WORKS.

Dated January, 11th.

Issued.

Rect. *Encl.*

G.O., 11th January 1882, No. 87 W.

JANUARY.

Nos. 39-40.

Re-appropriation to Works of the sum of Rs. 60,000 from the excess provision in the Provincial Budget Estimate for 1881-82 for Establishment.—Passing orders on letter from the Government of India declining for certain reasons to approve of the —

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PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 88 W.

No. 41.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—In reply to your letter No. 473 A.—G., dated 22nd December 1881, ruling that only outlay on or in connection with the preparation of the projects likely to be classed as "Protective" could be legitimately charged against the promised Imperial grant of 2½ lakhs for the current official year, I am desired to state that in the opinion of the Right Honorable the Governor in Council the following works (see Appendix D, printed with G.O., 14th July 1881, No. 1,729 W.,) should be so classed, viz.:—

(*a*) Ganjam Gopálpur Tidal Canal.
(*c*) Buckingham Canal.
(*d*) Do. do. south of Markanum.
(*e*) Baroor Tank.
(*f*) Marandahaly Tank.
(*g*) Vaniar do.
(*h*) Hindupur do.
(*i*) Roddam do.
(*l*) Periyár Project.
(*m*) Poogalur Channel.
(*n*) Rushikulya do.
(*r*) Bhavání Reservoir.

2. As regards (*b*) in the same list, viz., the road from Salur, viâ the Potinghy Ghât, to Koraputt, &c., the Government in deference to the opinion expressed by the Government of India in their letter as per margin have omitted it, though at the same time desirous that the matter may be reconsidered on the grounds (1) that the work is in itself certainly Protective in character (see the reasons given in Appendix D above), and (2) that neither a navigable canal or a railway has apparently any chance of being ever made so as to serve this part of the country.

No. 467 I., dated 23rd December 1881.

3. With the exception of project (*c*), the Buckingham Canal, all the others are at present in a condition which renders it difficult if not impossible to state in even an approximate way what the charges for establishment during the current year are likely to be.

4. One Project Division only has been completely formed, while the other three are only partially so, and at the same time officers not exclusively told off to their divisions are engaged on some of the projects.

5. To place the matter for the current year on a basis that may readily approve itself to the Government of India, the Right Honorable the Governor in Council desires me to suggest that the re-appropriation asked for (Rs. 60,000) may be definitely made towards covering part of the charge for the year on the Buckingham Canal.

6. The condition and character of this work are generally defined in Appendix D, and it may therefore suffice to say that the most strenuous efforts are being made to frame the complete estimate for the work.

7. From the normal character of many of the questions that have presented themselves for solution in dealing with this great work, and from the special and close study needed at nearly every drainage crossing in a length of 240 miles, unavoidable delays have occurred, but as most of the detailed estimates connected therewith have already received the approval of this Government, hopes are now entertained that in two or three months at furthest the complete project will be ready for submission to the Government of India.

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,
11th January 1882.

Exd. S. T. Austin.
Spare Copies

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GENERAL.
ACCOUNT.

Govt. of 1882 Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated January, 11th.

Issued.

Recd. *Encl.*

11th January 1882, No. 88 W.

JANUARY.

No. 41.

On the subject of the re-appropriation o
Rs. 60,000 to works from the excess provi
sion in the Provincial Budget for 1881-82
for Establishment.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

18th February 1882, No. 451 W.

General Account.

Read the following papers:—

No. 80. Telegram from the Secretary to the Government of India, Public Works Department, Calcutta, to the Secretary to Government, Public Works Department, Madras, dated 2nd February 1882.

YOUR 88 W. of 23rd January. A lump sum grant cannot be made. Make the best approximate estimate possible of the probable outlay this year in preparing each project likely to be classed as Protective and wire total, sending details by post. Potinghy Ghât road cannot be so classed.

No. 80-A. Telegram from the Secretary to Government, Public Works Department, Madras, to the Secretary to the Government of India, Public Works Department, Calcutta, dated 6th February 1882.

YOUR telegram second instant. Required approximately for Establishment to prepare Protective projects a, c, e, f, h, l, and n, my No. 88 Rs. 23,000 current year, to which please add Rs. 37,000 on account of Works Buckingham Canal.

No. 80-B. From the Secretary to the Government of Madras, Public Works Department, to the Secretary to the Government of India, Public Works Department, dated 7th February 1882, No. 348 W.

I AM directed to acknowledge the receipt of your telegram of the 2nd February requesting to be furnished with the best approximate estimate possible of the probable outlay this year in preparing each project likely to be classed as protective.

2. The following telegram was despatched in reply on the 6th February:—

"Your telegram second instant. Required approximately for Establishment to prepare Protective projects a, c, e, f, h, l, and n, my No. 88 Rs. 23,000 current year, to which please add Rs. 37,000 on account of Works Buckingham Canal."

3. I am now directed to state that the lump sum of Rs. 23,000 has been made up as follows:—

	Rs.
(*a*) Ganjam-Gopálpur Tidal Canal	1,200
(*c*) Buckingham Canal	10,000
(*e*) Baroor Tank	5,000
(*f*) Marandahully	1,500
(*h*) Hindupur	2,000
(*l*) Perryaur	2,000
(*n*) Rooshkulia Channel...	1,500
	23,200

Or in round numbers Rs. 23,000

4. It has already been explained to the Government of India that this Government are not at present in a position to frame any reliable estimate of what the charges for establishment on these projects are likely to be during the current official year. The figures now put forward must therefore be accepted as a mere approximation only.

5. A sum of Rs. 37,000 has been added to the demand as a grant-in-aid on account of *Works* of the Buckingham Canal which have been in progress during the year. This project is almost certain to come within the category of Productive Works. If, however, the Government of India should feel any difficulty about assigning the Rs. 37,000 on account of *Works*, it is suggested that the amount might legitimately be conceded under "Establishment" in consideration of the time devoted by the Chief and Superintending Engineers to the elaboration of the projects specifically named.

No. 80-C. Telegram from the Secretary to the Government of India, Public Works Department, Calcutta, to the Secretary to Government, Public Works Department, Madras, dated 13th February 1882.

YOUR telegram 6th. Rs. 60,000 for outlay on Protective Works 1881-82 in the manner proposed sanctioned.

No. 81. ORDER THEREON, 18th February 1882, No. 451 W.

THE telegram from the Government of India of the 13th February will be communicated, with the previous correspondence above recorded, to the Examiner of Public Works Accounts for information and guidance.

2. The sum of Rs. 60,000 now sanctioned is made up as follows :—

	RS.
(1) Contribution to Establishment	23,000
(2) Contribution to Works, Buckingham Canal	37,000
Total ...	60,000

3. The total charges for Establishment during the current official year are expected to amount to Rs. 16,95,017, (*vide* G.O., No. 2922 W., dated 23rd November 1881,) against which grants have been made amounting to Rs. 16,73,629. The sum of Rs. 23,000 now sanctioned will raise the total of the grants to Rs. 16,96,629, or Rs. 1,612 in excess of the probable charges.

4. The sum of Rs. 37,000 granted on account of the Buckingham Canal Works will be credited to the appropriation for that work, which will be reduced by a corresponding sum, and the amount (Rs. 37,000) credited to the Provincial Reserve.

(True Extract.)

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

To the Superintending Engineer, Fifth Circle.
" Examiner of Public Works Accounts.
" Financial Department.

Exd. S. T. Austin.
Spare Copies -

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GENERAL.
ACCOUNT.

Govt. of (1882) Madras

PUBLIC WORKS

To

THE SUPERINTENDING ENGINEER,
FIFTH CIRCLE,
&c., &c., &c.

Dated February, 1882.

Issued

Read. *Exd.*

G.O., 18th February 1882, No. 451 W.

FEBRUARY.
Nos. 80 81.

Protective Works.—Passing orders on telegram from the Government of India sanctioning Rs. 60,000 for outlay in 1881-82 on—.

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

21st February 1882, No. 471 W.

General Account.

Read the following paper:—

No. 88. From Major A. FILGATE, R.E., Deputy Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, dated Fort William, 14th February 1882, No. 33 A.—I.

WITH reference to the correspondence noted in the margin, relative to the grant for establishment for the purpose of preparing projects likely to be classed as "Protective," I am directed to state that the Rs. 60,000 sanctioned in my telegram of yesterday for expenditure during the current year on Famine Relief Protective Works is the only sum that can be assigned to Madras under this head for outlay during 1881-82.

No. 88 W., dated 11th January 1882, from the Secretary to Government, Public Works Department, Madras.
Telegram, dated 2nd February 1882, from the Secretary to Government of India, Public Works Department.
Telegram, dated 6th February 1882, from the Secretary to Government, Public Works Department, Madras.

No. 89. ORDER THEREON, 21st February 1882, No. 471 W.

RECORDED in continuation of G.O., No. 451 W., dated 18th February 1882.

(True Extract.)

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

To the Examiner of Public Works Accounts.
„ Financial Department.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

To

THE EXAMINER OF PUBLIC WORKS
ACCOUNTS,
&c., &c., &c.

Dated February, 21st.

Issued

Recd. Encl.

G.O., 21st February 1882, No. 471 W.

FEBRUARY.
Nos. 88-89.

Famine Relief Protective Works.—Letter from the Government of India stating that Rs. 60,000 already sanctioned for expenditure on — is the only sum that can be assigned under this head for the current year, recorded.

All communications should be addressed to the Secretary.

No. 107 A J

1940/55

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

Irrigation

To The Secretary to the
Government of Madras,
Public Works Department

Simla, 14th July, 1882.

Sir,

I am directed to acknowledge the receipt of your No 1307 W. dated 25th May 1882, relative to the portion of the Establishment charges debitable to the grant for Protective Public works, and in reply to state that the Government of India is pleased to rule that

(a) In the case of expenditure from Protective Funds on works the usual percentages for Establishments and Tools and Plant, may be allowed

(b) In the case of Survey Divisions

or other Establishments employed exclusively in the preparation of Projects, the actual cost of the Establishments so employed, without any allowance for Accounts or Direction – should be charged –

I have the honour to be,
Sir,
Your most obed.t Servant
W. Crum
Collr.
Secretary to Govt. India
P.W.D.

A No. 1940 W 3/1st Augt
Commn. Accts
Govt. of India 1882, with
reference to G.G. No. 1366
dated 25th June 1880.

Rounded
27.7.82

Ewan Plowden
Offg. Secy. to Govt. of India
Public Works Dept.

G. G. No 1307 W of 22 May 82

Copy sent to Accts. 31.7.82

4918.

Govt of (1882) Madras.

PUBLIC WORKS.

Read. 18 Aug 1882

Rect. Read.

G. O. 1st Augt 1882, No. 1940 dt.

Nos.

Establt. Charges.

Ruling of the Govt
relative to the portion
Rs — debitable to the
Basin for Protective
Public Works executed