M.R.O. 1—77,006—5-6-37.

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(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

Cons. 20-5-186

G.O. No.	986-87	Press / Mis.
Dated	21-23 11-5-	186 c.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, for the month of May 1860.

No. 21. Read the following letter from Captain C. H. DICKENS, Officiating Secretary to the Government of India, to J. D. BOURDILLON, Esq., Secretary to the Government of Madras, dated Fort William, 2nd May 1860, No. 2,235:—

I am directed to acknowledge receipt, on the 9th March, of your letter No. 382 of 21st February 1860, submitting the Madras Public Works Budget for 1860-1, and have now to communicate the Orders of the Government of India thereon.

2. The Honorable the President in Council desires me, in the first place, to remark that the Budget submitted on this occasion is equal, or even superior, in completeness, arrangement of details, and neat appearance to those submitted by the Madras Government in former years. The classification of the repairs is very satisfactory.

3. The Rules referred to in your 4th paragraph have already been furnished to the Government of Madras in Appendix A. of the Bengal Public Works Code. This should have been intimated to you at the time. The Forms have not yet been re-printed; but are the same as those originally published with the Classification Report.

4. The Budget for 1860-1 contains proposals for an expenditure of three-quarters of a million sterling by the Public Works Department of Madras within the year. Of this large sum only £2,27,500 can be devoted to new works, and of these again the expenditure on altogether new projects to be commenced within the year is under £20,000; the proportions which the classes of expenditure bear to each other is as follows:—

	Per cent. of total proposed outlay.	
New Works...	30·34	30·34
Repairs	42·00	
Establishment	22·66	
		64·66
Reserve for unforeseen requirements	5·00	5·00
Total.....		100·00

So that in fact two-thirds of this large expenditure is for Establishments and repairs, and only one-third goes towards the material improvement of the country.

5. This state of things appears to require the most serious attention of the Government of Madras. The Government of India is as yet unable to increase the assignment of funds already intimated in the Order of 5th December last; and it therefore depends very much upon the exertions of the Government of Madras, and its Officers, in economising in repairs and Establishments, to enable the progress of public improvements to continue.

6. The Government of India have no wish to stint absolutely necessary repairs. That would be a false economy. Nor is the Government of India disposed to doubt that the increased outlay of late years on repairs has led to great advantages to the public, and improvement of the revenue. But still it is not the less necessary to exercise a strict economy in the supervision of so large an outlay.

7. It is observed that a system of "allowances" for repairs exists in the Madras Public Works Department, instead of regular Estimates being exacted, showing precisely the work to be done; and that these "allowances" more than cover the expense of ordinary repairs. It is to be feared that, under this system, a great deal of money spent under the name of repairs is really frittered away in petty improvements at the fancy of the Engineers, and thus the progress of large and important works is starved.

8. It seems to the Government of India to be very necessary for proper economy that the work to be done should be precisely specified in the Estimates for repairs, and that the way in which the money is laid out should afterwards be clearly shown by a detailed report of the work actually executed, properly verified. This may be managed under such regulations as not to unduly cramp the discretion of the superior Public Works Officers.

9. In regard to the Establishments the Government of India would wish to know what steps are taken to economise their labor, and ensure their having, as nearly as may be, full employment during the whole working season. It is thought that by establishing a rotation in the execution of repairs to small Irrigation works, so as to take up Táluq after Táluq, the same Establishment could supervise the works of two or three Táluqs, which might otherwise be kept up only for the repairs in one. The same principle would, to some extent, apply to the executive ranges in general. This subject, however, has probably already been dealt with by the Madras Government. If so, the Government of India would be glad to have a report in detail of the result.

No. 22. ORDER THEREON, 11th May 1860, No. 986.

1. Ordered to be communicated to the Chief Engineer.

2. Eight lacs being struck off by this letter, from the sum proposed in the Budget for expenditure on Public Works within the current year, it is necessary to revise the distribution of the available amount; the Chief Engineer will advise the Government on this subject after careful consideration.

3. Major Horsley's attention will be called to the remarks of the Government of India, in paragraphs 4 to 8 on the subject of repairs; and he will be requested to consider and report whether some reduction may not properly be made, under the present limitation on expenditure, in the sums allowed for the repair of irrigation works, so as to obtain a larger amount for improvements. He will also reply to the remarks in paragraphs 7 and 8.

4. He will also give consideration to those in paragraphs 9 and 10 on the subject of Establishments.

5. Paragraphs 13 to 17 will be referred for consideration in the Military Department.

6. It will be pointed out to the Government of India that the first two of the three works mentioned in paragraph 25 were sanctioned by that Government on the 8th and 13th August 1859, Nos. 5,543 and 5,716.

(Signed) J. D. BOURDILLON,
Secretary to Government.

No. 23. Ordered in consequence that the following letter be dispatched:—

From J. D. BOURDILLON, Esq., Secretary to the Government of Fort Saint George; to Captain C. H. DICKENS, Officiating Secretary to the Government of India, D. P. W., dated 11th May 1860, No. 987.

In paragraph 25 of your letter of the 2nd May, No. 2,235, two works are noticed as having been introduced into the Budget notwithstanding the refusal of the Government of India to sanction them. I am directed to point out to you that both those works have been sanctioned by the Government of India; viz., the road from Kunúr and Wellington (Jackatalla) to Ootakamund on the 13th August, and that from Venkatramrazpet to Rayachoti on the 8th idem.

PUBLIC WORKS DEPARTMENT.
Public.

FORT SAINT GEORGE,
11th May 1860.

No. 987.

From

J. D. BOURDILLON, Esq.,
Secretary to the Government of Fort Saint George,

To

CAPTAIN C. H. DICKENS,
Officiating Secretary to the Government of India, P. W. D.

SIR,

In paragraph 25 of your letter of the 2nd May, No. 2,235, two works are noticed as having been introduced into the Budget notwithstanding the refusal of the Government of India to sanction them. I am directed to point out to you that both those works have been sanctioned by the Government of India; viz., the road from Kunúr and Wellington (Jackatalla) to Ootakamund on the 13th August, and that from Venkatramrazpet to Rayachoti on the 8th idem.

I have the honor to be,
Sir,
Your most obedient Servant,

(Signed) J. D. BOURDILLON,
Secretary to Government.

Exd. Wm. Thomas.

No. 2235.

FROM THE OFFG. SECRETARY TO THE GOVERNMENT OF INDIA,

TO THE SECRETARY TO THE GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT,
Fort William, 2nd May 1860.

SIR,

I AM directed to acknowledge receipt, on the 9th March, of your letter No. 382 of 21st February 1860, submitting the Madras P. W. Budget for 1860-61, and have now to communicate the orders of the Goverment of India thereon.

2. The Hon'ble P. in C. desires me, in the first place, to remark that the Budget submitted on this occasion is equal, or even superior, in completeness, arrangement of details, and neat appearance, to those submitted by the Madras Government in former years. The classification of the repairs is very satisfactory.

3. The Rules referred to in your 4th para. have already been furnished to the Government of Madras in Appendix A. of the Bengal P. W. Code. This should have been intimated to you at the time. The Forms have not yet been re-printed; but are the same as those originally published with the Classification Report.

4. The Budget for 1860-61 contains proposals for an expenditure of three-quarters of a million sterling by the P. W. Dept. of Madras within the year. Of this large sum only £227,500 can be devoted to new works, and of these again the expenditure on altogether new projects to be commenced within the year is under £20,000; the proportions which the classes of expenditure bear to each other is as follows:—

	Per cent. of total proposed outlay.	
New Works	30·34	30·34
Repairs	42·00	
Establishment	22·66	
		64·66
Reserve for unforeseen requirements	5·00	5·00
	Total	100·00

So that in fact two-thirds of this large expenditure is for establishments and repairs, and only one-third goes towards the material improvement of the country.

5. This state of things appears to require the most serious attention of the Government of Madras. The Goverrment of India is as yet unable to increase the assignment of funds already intimated in the order of 5th December last; and it therefore depends very much upon the exertions of the Government of Madras, and its Officers, in economising in repairs and establishments, to enable the progress of public improvements to continue.

6. The Government of India have no wish to stint absolutely necessary repairs. That would be a false economy. Nor is the Government of India disposed to doubt that the increased outlay of late years on repairs has led to great advantages to the public, and improvement of the revenue. But still it is not the less necessary to exercise a strict economy in the supervision of so large an outlay.

7. It is observed that a system of "allowances" for repairs exists in the Madras P. W. Dept., instead of regular estimates being exacted, showing precisely the work to be done; and that these "allowances" more than cover the expense of ordinary repairs. It is to be feared that, under this system, a great deal of money spent under the name of repairs is realy frittered away in petty improvements at the fancy of the Engineers, and thus the progress of large and important works is starved.

8. It seems to the Government of India to be very necessary for proper economy that the work to be done should be precisely specified in the estimates for repairs, and that the way in which the money is laid out should afterwards be clearly shown by a detailed report of the work actually executed, properly verified. This may be managed under such regulations as not to unduly cramp the discretion of the superior P. W. Officers.

9. In regard to the establishments the Government of India would wish to know what steps are taken to economise their labour, and ensure their having, as nearly as may be, full employment during the whole working season. It is thought that by establishing a rotation in the execution of repairs to small irrigation works, so as to take up talook after talook, the same establishment could supervise the works of two or three talooks, which might otherwise be kept up only for the repairs in one. The same principle would, to some extent, apply to the executive ranges in general. This subject, however, has probably already been dealt with by the Madras Government. If so, the Government of India would be glad to have a report in detail of the result.

10. I am desired, however, to remark, with reference to the notice taken of this subject in the orders on the Budget of the previous year, that

the charges in some divisions are shown by the tables in this Budget to be exceedingly high. The following require special notice:—

District.	Establishment.	Expenditure.	Per Cent.
	Rs.	Rs.	
Ganjam	46,583	1,12,855	41·2
Vizagapatam	26,134	38,821	67·3
Kutree	1,14,382	2,25,471	50·7
Cuddapah	62,028	1,48,017	41·9
Kurnool	28,722	67,131	42·7
Madura	45,794	93,684	48·8
Tinnevelly	48,628	90,521	53·7
Coimbatore	60,865	94,373	64·4
Canara	49,647	95,211	52·1

It is not, of course, expected that such excessive proportions of establishment can always be avoided, but it can hardly be conceived that they are actually necessary in so many cases.

11. I am further to point out the frequency with which extensive repairs are rendered necessary by floods, &c.; which appear to show that it might be real economy to improve the designs and arrangements of the works in many cases. In all cases of such accidents, these matters should be closely scrutinized, and when it can be afforded a re-construction on improved principles should be preferred to a mere return to the *statu quo* before the accident. I am to instance the Reports from Tanjore, Nellore, Bellary, and Cuddapah, of the effects of the storms of 1858-59; and am instructed to ask how far the views above expressed have been acted on in providing for the restoration of the injured works.

12. I have now to pass on to the projects brought forward for sanction.

13. No. 1. *Barracks for two Companies of Artillery at Bellary.*—This project is in furtherance of Sir P. Grant's views as to the Military occupation and defences of the Madras Presidency. On the scheme as a whole the Government of India have not yet passed any opinion. But Bellary is one of the permanent strategical points of Southern India; and a place, therefore, where Military buildings are not likely to be thrown away or hereafter abandoned. There are, however, some points on which the Government of India would wish to have further explanation before sanctioning the outlay proposed.

14. The condition of the old Artillery Barracks is not mentioned, nor is the urgency of the demand for construction of new Barracks at all explained. It appears also open to question whether the site selected is the best.

If any disturbance were to arise in Bellary, it seems reasonable to suppose that it would be an object to occupy and secure the citadel, or highest point, in order to overawe the town and bazar and protect the cantonment. It is also an object to have the European Troops located together, so that, in time of need, a small portion may remain to garrison the Barracks while the rest are on service in the field.

15. If new Barracks at Bellary are inevitable, the choice of site would be settled by the consideration as to where a small garrison would be most secure, best able to make a defence, to protect the Barracks and cantonment, and keep the town in check. Judging from the papers sent up, the citadel or upper fort would appear to fulfil these conditions better than the locality chosen in the open plain, which is within gun range of, and commanded by the citadel.

16. Though the citadel may be useless as a defensive work at present, it is not shown that the existing works cannot be taken down, and the requisite Barracks be so devised as to form a defensible enclosure on the top.

17. The Government of India would wish to learn whether such an arrangement be possible, aud whether a small garrison of 300 men, placed in defensible Barracks on the high plateau, could not, with a few guns, protect the station and overawe the town and bazar more effectually than a similar force lodged in the open plain and within gun-shot of the heights.

18. *No* 2. *Engineer's Store Yard, Rs.* 73,390, instead of Rs. 61,000 as before estimated.—The explanation as to the insufficiency original estimate does not appear to be quite satisfactory. The Government of India are, however, satisfied as to the necessity for the present estimate, and sanction its adoption, and the outlay of Rs. 45,220 in the year 1860-61.

19. *No.* 3. *Locks and Weir on the Nizampatam Channel, Rs.* 34,600. —The Government of India are quite satisfied as to the necessity for this work, but would have preferred that it should have been brought forward as part of the original design. The present project appears to have been very well got up, and is sanctioned; the whole outlay to be incurred in 1860-61.

20. *No.* 4. *New head to the Sarvapalli Channel in connexion with the Pennair Annicut, Rs.* 59,580.—An expenditure of Rs. 10,000 has already been sanctioned by the Madras Government, and the work, it appears, is to be finished in 1860-61. This work appears to be very necessary and proper, and the designs are unobjectionable; but I am to remark the want of a longitudinal section of the new channel, which is an essential part of the project. Its slope is not even mentioned. It is presumed, however, that all necessary information has been laid before the Chief Engineer; and the Government of India sanction the estimate and the expenditure proposed for 1860-61.

21. *No.* 5. *Supplementary Estimate for metalling and completing the Road from Cannanore into Mysore, including the Perambadi Ghaut*

Rs. 56,000.—The estimate is sanctioned: the Madras Government do not propose any expenditure for 1860-61.

23. *No.* 6. *Cart Road from Malliapooram to Ponani, Rs.* 61,800, *expenditure for the year Rs.* 20,000.—No plans or sections are submitted; but the Government of India does not consider it necessary, in a case of this kind, to defer sanction on that account. The expenditure may take place accordingly.

22. *No.* 7. *Canal between the Cooam and Adiyar at Madras, Rs.* 3,59,300.—The details of this project are got up in a very creditable manner by Mr. Kennedy, the Assistant District Engineer. I am to remark only on one point, and that is the omission to explain the range of the tides. This is doubtless well known on the spot, but an explicit statement should not have been omitted in a project which required sanction not only of the Government of India, but of the Secretary of State. The Government of India understand that the difference of level between high and low water at springs does not exceed four feet; so that there is no danger of inconvenience from boats grounding in the Canal at low water, or from the want of sufficient headway in the bridges.

24. Under the permission given in the Right Hon'ble the Secretary of State's Despatch No. 19 of 20th February 1860, the Government of India sanction the estimate and authorizes the Government of Madras to order the commencement of the work as soon as funds can be provided for the purpose. The misconception as to the termini of the existing Canals, and object of the new connecting cut, will be explained to H. M.'s Government in reporting the sanctions given on this Budget.

25. Having now sanctioned, with one exception, all the projects sent up by the Government of Madras in Part I. of the Budget, the Hon. P. in C. desires me to state that the Government of India also approve of the expenditure proposed in Part. II. with the following three exceptions:—

No. 151. Metalling road and constructing parapet walls between Cunur, Jackatalla and Ootacamund. Estimate Rs. 32,000; expenditure for 1860-61 Rs. 10,000.—Sanction to this work was refused in this Office No. 5136 of 30th July 1859, paragraph 28. It has probably been inserted in the Budget by an oversight.

No. 168. Road from Vencataramrazpet to Rayachoty, Cuddapah. Estimate Rs. 41,300; proposed for the year Rs. 20,000; already spent Rs. 9,500. This work was also ordered to remain in abeyance. See paragraph 8 of this Office No. 4606 of 22nd September 1858. No explanation has been afforded of its insertion in the present Budget Statement No. 2.

No. 190. Extension of Canal from Dugurazpatam to Kistnapatam Backwater, Chingleput. Estimate Rs. 1,39,665; already spent Rs. 1,847; proposed for the year Rs. 1,00,000.—This must be suspended under the orders

of the Secretary of State in his letter to Madras, No. 29 of 8th March 1860.

26. I am, in conclusion, to repeat that the original assignment of sixty-seven lakhs for the Madras Public Works expenditure for 1860-61 must not be exceeded; and that the sanctions above given have been accorded in the hope that the Government of Madras will be able, by the exercise of a strict economy in repairs and establishments, to provide the necessary funds for prosecuting all the works sanctioned without exceeding the total outlay of sixty-seven lakhs.

27. The Plans and Estimates are returned herewith.

I have the honour to be,

SIR,

Your most obedient Servant,

H. D. Robertson Esq

Offg. Secy. to the Govt. of India.

P. W. D.
15 a

No. 986.

Proceedings of the Madras Government
Under date the

Read the following letter
from the Officiating Secretary
to the Government of India.

Communicating the orders of the Government of India on the Madras Public Works Budget for 1860-61. (Here enter 2nd May 1860 No. 2335)

1. Ordered to be communicated to the Chief Engineer.

2. Eight lacks being struck off by this ~~order~~ letter, from the amount proposed in the Budget for expenditure on Public Works within the current year, it is necessary to revise the distribution of the available amount; the Chief Engineer will advise the Government on this subject after careful consideration.

3. Major Horsley's attention will be called to the remarks of the Government

of

To the Chief Engineers.

Public Works Dept.
Fort St. George
May 1860.

From the Officiating Secy.
to the Govt. of India.
Dated 2 do.
Recd 9th May 1860.
No. 2235.

Communicating the orders of the Govt. of India on the Madras Public Works Budget for 1860-61.

Public Works Dept.
Fort St. George
May 1860.

Copy.

of India in Paras 4 to 8 on the subject of repairs; and he will be requested to consider and report whether some re-duction may not properly be made, under the present limitation on expenditure, in the sums allowed for re-pair of irrigation works, so as to obtain a larger amount for improvements. He will also reply to the remarks in Paras 7 and 8.

4. He will also give consideration to those in Paras 9 and 10 on the subject of Establishments.

5. Paras 13 to 17 will be referred for consideration in the Military Department.

6. It will be pointed out to the Government of India that the first two of the three works mentioned in Para 25 were sanc-tioned by that Government on the 8th and 13th August

1859 etc. 5543 and 5716.

To Copies to the Chief Engr. 3 and the Letter
7 — Bitty Engr. 3

Public Dept.

No 987.

Capt. H. M. Dickens
Officiating Secretary to the Government
Madras

Sir

I am desired by the Governor in Council to request that you will move the Council at their meeting on Monday next the 28th instant to take into consideration the Budget estimate of the Public Works Department for the ensuing year, and to submit the same for the sanction of the Government of India.

I am also directed to request that you will move the Council to pass such orders as they may think proper for the disposal of the Surplus Funds of the Presidency, and to submit the same for the sanction of the Government of India.

I have the honor to be
Sir
Your most obedient Servant
(Signed) H. Dickens
Officiating Secretary to Government

Fort St. George
11th May 1860.

Rec'd 29th Feby 1860
No 7-3

Public Works 1860 Dept.
Pro: of Govt 20th May

No 986.

Pro: of the Madras Govt.
of 11th May 1860.

From the Govt of India Dy 5th
May/60 Ltr 125 with Pro:
From the Chief Engr of 23 May/60
Ltr 1278 with

(Passing) order on
the views of the Govt of
India on the Madras
P. W. Budget for 1860-61
From Chief Engr of 2d March
1861 - Ltr No 492 - with
12 Enclosures No 503.
Comm Dy 5 Sept 1860
Ltr 2046 in Pro
From Do Dy 30 Sept 1860 Pro
2196 in Ltr

821 & 22. 28.

Public Works 1860 Dep.tt
Pro: of Govt 20th May
No 987.

To the Officiating
Secretary to the Govt of
India.
Dt 11th May 1860.

From — Do — 5th May/60.
C No 1215 in Pro: 31st May,
From — Do — 29th May/60.
C No 1443 in Pro.

Pointing out the
sanction of the Govt of
India to the road from
Tumir and Willingtond
to Utakamund and to
that from Vencatagiry
Pettah to Royachoti.

205
21, 22, 23

No 23.