

(1) Number of pages 62
(2) Date of repair Dec. 88
(3) Initials of the Referencer lms

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. N. D. DEPARTMENT

G.O. No.	12397 W. 40	Press.
B.P. No.		Mis.
Dated	17. 5. 1886	198

Not to be folded or roughly handled

17TH MAY 1886, No. 1240 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT

Buildings and Roads.
Military Works.

READ—the following letter from the Quartermaster-General, to the Secretary to Government, Military Department, dated Ootacamund, 30th April 1886, No. 1675 A:—

I have the honor, by order, to forward, for sanction and transfer to the Public Works Department for disposal, the estimates, plans, &c., below mentioned, which have been approved by the Commander-in-Chief. The plans and estimates have been countersigned:—

Abstract and detailed estimates, amounting to Rs. 45,420, for constructing a magazine for the accommodation of ordnance and artillery reserve powder, on the Wallajah berm, Port St. George, capable of holding 3,000 barrels, with two plans, report and specification.

2. The necessity for this work has already been explained in paragraph 9 *et seq.* of this office letter, No. 345 A., of 28th January 1886, and in paragraph 4 of letter, No. 1540 A., of 16th instant, to Secretary to Government, Public Works Department (through Military Department).

No. 2638, Military.

Approved, and transferred to the Public Works Department for disposal.

(By Order.)

OOTACAMUND,
1st May 1886.

(Signed) A. R. KENNEY-HERBERT, Lieut.-Col.,
Secretary to Government.

ORDER—dated 17th May 1886, No. 1239 W., Public Works.

Ordered to be forwarded for the early sanction of the Government of India, with advertence to paragraph 3 (iv) of their resolution, No. 445 M.W., dated 24th March 1886, and paragraph 4 of the proceedings of this Government, No. 1084 W., dated 29th April 1886.

(Here enter No. 1240 W., dated 17th May 1886.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
" Examiner, Public Works Accounts.
" Military Department.

ENDORSEMENT—dated 17th May 1886, No. 1240 W., Public Works.

Forwarded.

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

Exd. E. Fernandez.
Spare Copies

1397/1940
2

BUILDINGS AND ROADS.
MILITARY WORKS.

Gobt. of (1886) Madras.
PUBLIC WORKS.

Dated May, 17th.

Recd.

Encl.

G.O., 17th May 1886, No. 1240 W.

MAY.

Magazine

New — in the Wallajah berrn, Fort St. George.—Plan and estimate for constructing a —, forwarded for sanction of the Government of India.

29TH APRIL 1886, No. 1084 W., PUBLIC WORKS.

1237540
3

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

Resolution of the Government of India, Military Department (Accounts—Budget), dated Fort William, 24th March 1886, No. 445 M.W.

MADRAS.

Orders on the Military Works Budget Estimate for 1886-87 and Revised Estimate for 1885-86.

Read—

Military Department Resolution, No. 1208 M.W., dated 27th October 1885.
Letter, No. 3093 W., dated 30th December 1885, from the Government of Madras.
Military Department telegram, No. 218 M.W., dated 18th February 1886.
Telegram, dated 19th February 1886, from Government of Madras.

Resolution—

The estimates of revenue are accepted for the sums entered in the following table :—

REVENUE.

	Budget estimate, 1886-87.	Revised estimate, 1885-86.	Budget estimate, 1885-86.	Actuals, 1884-85.
	RS.	RS.	RS.	RS.
In Public Works Department	30,000	29,500	29,500	33,586

EXPENDITURE.

2. Budget estimate, 1886-87.—The estimate has been framed for the total provisional grant of Rs. 6,50,000 sanctioned in Military Department resolution, No. 1208 M.W., of the 27th October last. It is represented that the grant for minor works and repairs is insufficient to meet the requirements under these heads, and that a further grant of Rs. 1,94,000 * is necessary for this purpose. The Government of India are, however, not prepared to increase the grant already assigned, and desire that the distribution of the allotments for original works may be reconsidered with regard to the number of troops likely to be retained in Upper Burma. The amount of such reductions as may be decided upon may be applied to minor works and repairs subject to a total limit of Rs. 27,000 for minor works and Rs. 3,25,000 for repairs.

	RS.
* Repairs	78,432
Minor works	78,000
	1,56,432
Establishment and tools and plant at 24 per cent.	37,544
	1,93,976
Or in round figures	1,94,000

3. The details of the estimate for original works are provisionally accepted subject to the following remarks:—

i.—*Class A Works*.—The allotments for items 1 to 7 are passed subject to the reconsideration referred to in paragraph 2. The grant for item 9, fortified post at Agram, is also passed provisionally, pending receipt of a report as to the nature of the further work to be carried out. It was understood that the work had been completed last year.

ii.—*Class B Works*.—None of the works in this list appear to the Government of India to be of much urgency: they might be postponed to the extent necessary to provide for increased allotments under the head minor works and repairs.

iii.—It is noticed that provision to the extent of Rs. 40,000 is proposed for alterations to the offices of the Accountant-General and Controller of Military Accounts to make the building suitable for the accommodation of troops. This expenditure would have been necessary had another building for the accommodation of the Military Account offices been acquired. But the scheme for the location of these offices in the building known as "The Mansion" has fallen through, and with it the need for the alterations.

* Including establishment and tools and plant charges. The proposed allotment of Rs. 49,600* for alterations to the offices in the fort is accordingly withdrawn.

iv.—*Item 9 (B), Constructing a new magazine in the Wallajah term, Rs. 20,000*.—The grant is passed provisionally, pending sanction of the Government of India to the commencement of the work; but the necessity of the work must first be fully explained and the estimate duly sanctioned.

v.—*Accommodation for additional troops*.—A special grant of Rs. 44,000 (including establishment and tools and plant charges) is hereby sanctioned to provide for additional accommodation owing to increased strength of British troops.

4. The modifications ordered in clauses iii and v of the foregoing paragraph result in a net reduction of the provisional grant of Rs. 6,50,000 by Rs. 5,600. The final issue of the budget estimate for 1886-87 should therefore be prepared for a total expenditure of Rs. 6,44,400.

5. *Revised Estimate for 1885-86*.—The estimate is passed for the full amount of the existing grant, Rs. 4,67,000.

6. The details of the estimates of expenditure passed by the Government of India are shown in the following table:—

	Budget estimate, 1885-87.	Revised estimate, 1885-86.	Budget estimate, 1886-87.	Actuals, 1884-85.
	RS.	RS.	RS.	RS.
Original Works	91,600	2,04,600	2,29,646	2,09,361
Repairs	1,91,000	1,71,300	2,94,549	2,83,366
	3,25,000			
Total, Works and Repairs	5,13,500	3,75,900	5,24,195	4,92,727
Establishment	1,20,700	87,400	1,20,563	1,14,345
Tools and Plant	5,200	3,700	5,242	4,935
Grand Total	6,44,400	4,67,000	6,50,000	6,12,007
Deduct—Expenditure in England	...	...	...	250
Net Indian outlay	6,44,400	4,67,000	6,50,000	6,11,757

7. It is observed that the estimates for the four class A works named in the margin have been revised without reference to the Government of India. It is of course within the competency of the Government of Madras to revise estimates within authorised limits, but in the case of

Item	Amount of Estimate.	
	Budget, 1885-86.	Budget, 1886-87.
Item 1.—Barrack for British Infantry, Malapuram	1,31,610	1,35,094
" 3.—Royal Artillery barracks, St. Thomas' Mount	1,25,456	1,46,910
" 4.—Do. stables do.	20,140	21,702
" 9.—Fortified post, Agram	34,280	38,790

military works it appears desirable that the Government of India should be informed of the causes which have led to the sanction of enhanced estimates.

8. The authority herewith given to incur expenditure within the limits of the grants shown in the table in paragraph 6 is subject to the condition of a strict observance of the rules in force with regard to the financial regularity of departmental work.

Order—

Ordered that the foregoing be communicated to the Government of Madras, for information and guidance, with the request that 45 printed copies of the budget estimate as now passed may be submitted so as to reach the Government of India not later than the 1st May 1886.

Ordered, also, that a copy be forwarded to the Accountant-General, Public Works Department, for information.

From Colonel E. FAUNCE, Officiating Quartermaster-General, to the Secretary to Government, Public Works Department, dated Ootacamund, 16th April 1886, No. 1540 A—Through the Secretary to Government, Military Department.

In reply to your letter, No. 1395C, of 6th instant, forwarding copy of resolution (a)

(a) No. 445 M.W., of 24th March 1886. of the Government of India on the military works budget of this presidency for the current year, I am desired to state as follows as regards the several points on which you request information.

I. The Commander-in-Chief regrets that he finds himself unable to recommend any modification of allotments for items 1 to 7, class A works, with reference to the number of troops likely to be retained in Upper Burma, the whole of them being works of special urgency; but, if Government consider it absolutely necessary to

make a reduction in the allotment for original works, His Excellency, in deference to such opinion, would, though most reluctant to do so, suggest that expenditure be deferred on items * 2 and 5 only of that list. It may be observed here that, as under present conditions there

is no probability of a third regiment of Madras Infantry being located at Trichinopoly, His Excellency has recently submitted† to the Government, in the Military Department, a proposal to appropriate from the grant of Rs. 18,000 made for buildings for two regiments, Madras Infantry, at that station (item No. 6) a sum of

	Grant.
	RS.
* 2. Fort St. George: Converting a racquet court into a covered gymnasium	9,890
5. Bangalore: Public buildings for a regiment of Madras Cavalry	14,000

† Quartermaster-General's letter, No. 1420 A, of 7th April 1886.

Rs. 9,000 towards the execution of certain repairs necessary to the Commissariat granary buildings on the beach at Madras to render them suitable as store-rooms for the accommodation of stores to be removed from the casemates in Fort St. George, which it is contemplated to hand over to the Ordnance Department. The remainder of the grant (viz., Rs. 9,000), His Excellency proposes should be spent on the erection of a magazine at Trichinopoly for the one regiment, Madras Infantry, now placed on the new site, the only outlay actually requisite in the current year for buildings for that regiment, and on the construction of stone drains urgently required for the new lines there, regarding which Government will be addressed separately. Estimates for these works have not as yet been received, but, roughly, they may be expected to cost, the former about Rs. 2,000, and the latter about Rs. 7,000.

II. The further works requisite on the Agram fortified post are those below noted as already sanctioned—

- (a) A guard-room and fire-engine shed at Rs. 1,490, sanctioned in proceedings of Government, No. 3059 W., of 13th December 1885 (Military Department No. 48 of 5th January 1886).
- (b) A latrine at Rs. 399, sanctioned in proceedings of Government, No. 250 W., of 28th January 1886 (Military Department No. 827 of 8th February 1886).

These works represent an aggregate cost of Rs. 1,880, so that the grant for this year would be reduced from Rs. 5,000 (the amount fixed when the probable maintenance of an Ordnance dépôt was contemplated) to Rs. 1,880, the saving of Rs. 3,120 passing to the grant for minor works. It may be here noted that the decision not to maintain an Ordnance dépôt in the fortified post does not do away with the necessity for the works above mentioned, which will still be requisite for the guard, &c., to be kept in the post for the magazines and armament.

III. His Excellency is of opinion that all the works entered in class B of the preliminary issue of the budget are of real urgency, and cannot, therefore, well be postponed, but in view of the present financial pressure, His Excellency will be prepared to relinquish this year the grant (item No. 12) for constructing a draw-bridge and gate for the Vellore fort (Rs. 6,450) in order to provide for increased allotments under minor works and repairs.

IV. The necessity for a new magazine in the Wallajah berm, in Fort St. George, is as follows and has already been explained to Government, in the Military Department, in letter, No. 345 A., of 28th January 1886, from this office.

- (a) The existing magazines in Fort St. George are not considered safe and serviceable for the accommodation of the powder, &c., required for the fort armament.
- (b) The Ordnance Department requires more accommodation than the magazine at the Mount alone provides for powder, &c., which of necessity is maintained at Madras and near it.

V. The only new additional buildings required in connection with the augmented strength of British troops in this presidency are stables* for 66 extra horses, British Cavalry, at Bangalore, estimated to cost Rs. 6,000, at Rs. 87 (say 90) per horse. Besides these new buildings, alterations to the British Cavalry Barracks* at Bangalore to provide for the extra men to cost approximately Rs. 1,000 and alterations and additions to blocks of married quarters and to the building late in occupation by the Adjutant-General, and now occupied by the offices of the Surgeon-General, Her Majesty's Forces, &c., in Fort St. George, rendered necessary by the withdrawal of the scheme for locating the Account offices outside the fort, are imperative to provide accommodation for troops. The cost of these latter alterations, &c., cannot here be stated as estimates for them have not yet been received, nor of the improvements

* Proceedings of Government, Military Department, No. 183, of 8th January 1886.

emergently required to the old barracks at St. Thomas' Mount which are now occupied by the 1/4th Brigade, Royal Artillery, and detachment, 2nd Battalion, South Wales Borderers. His Excellency would therefore suggest that, in the final issue of the budget, the grant of Rs. 44,000 for providing additional accommodation for British troops be distributed somewhat in the following manner:—

Bangalore.		Rs.
British Cavalry Barracks and Stables	...	8,000
Fort St. George and St. Thomas' Mount.	...	
Sundry alterations and improvements as above noted	...	36,000
Total	...	44,000

No. 242, Military.

Forwarded.

OOTACAMUND,
19th April 1886.

(Signed) A. R. KENNEY-HERBERT, Lieut.-Col.,
Secretary to Government.

ORDER—dated 29th April 1886, No. 1084 W., Public Works.

The allotments for original works under classes A and B have, in communication with His Excellency the Commander-in-Chief, been revised as desired by the Government of India; and the final issue of the Imperial military works budget estimate for 1886-87 has been prepared as shown below, for the reduced grant of Rs. 6,44,400 sanctioned by the Government of India in their resolution read at the head of these proceedings:—

		Rs.
Original works	In progress	58,996
	Not commenced	1,49,039
		2,08,035
Repairs	...	3,10,465
Establishment	...	1,20,700
Tools and plant	...	5,200
Total	...	6,44,400

2. The provision for minor works has been increased to Rs. 27,000, the limit fixed by the Government of India; and that for repairs to the extent* of the available grant after distribution to

* Rs. 3,10,465.

Original Works, Establishment, and Tools and Plant.

3. The further works to be carried out in connection with the fortified post at Agram are detailed in paragraph 2 of the Quartermaster-General's letter, No. 1540 A., dated 16th April 1886, recorded above; and in the opinion of His Excellency the Commander-in-Chief they are necessary. As the cost of these works amounts to Rs. 1,880 only, the provision made for the project in the preliminary budget has been reduced to the extent actually required.

4. The necessity for constructing a new magazine in the Wallajah berm, Fort St. George, has already been fully explained in Military Department letter, No. 1078, dated 18th February 1886; and the Government of India will now be requested to authorise the commencement of the work so soon as plans and estimates have been sanctioned. Steps should be taken for the early submission of the plans and estimates, which the Superintending Engineer, V Circle, reported would be ready in April 1886.

29TH APRIL 1886, No. 1084 W., PUBLIC WORKS.

5. Provision to the extent fixed by the Government of India has been made for the additional buildings required in connection with the increased strength of British troops detailed in paragraph 5 of the

* No. 1340 A., dated 16th April 1886.

Quartermaster-General's letter† recorded above. Estimates for the works should be submitted with the least possible delay.

6. The Government of India will be addressed with respect to the remarks in paragraph 7 of their resolution.

7. The sum of Rs. 9,000, required for the Commissariat granary buildings on the beach at Madras, will be allotted as an addition to the repair grant to the Presidency division for 1886-87 in the orders on the statement of demands on account of incomplete and minor works and repairs.

8. Provision has been made in the budget for the marginally-noted works which His Excellency the Commander-in-Chief considers urgent. The necessary estimates should be submitted without delay.

Erection of a magazine at Trichinopoly of one regiment of Madras Infantry.
Construction of stone drains required for the new line at Trichinopoly.

9. The revised estimates for 1885-86 against "Original Works and Repairs," as shown in the preliminary issue, have been altered to Rs. 1,89,200 and Rs. 1,72,995 respectively, with reference to the transfers of funds since approved* by the Government of India, and to the transfer of Rs. 1,700 from repairs to original works, sanctioned in proceedings of the

* No. 92 W., dated 11th Jan. 1886.

" 679 W., " 13th Mar. "

" 764 W., " 22nd Mar. "

Madras Government, No. 152 W., dated 18th January 1886.

Telegram, dated 2nd April 1886.

" " 22nd " "

in the preliminary issue has been retained.

10. With these remarks, the final issue of the Imperial military works budget estimate for 1886-87 will be printed and circulated for the information and guidance of the officers of the department; copies, as noted in the margin, being forwarded to the Government of India.

To Shola	...	20
" Calcutta	...	35
		45

(Have enter No. 1085 W., dated 29th April 1886.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

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

Exd. E. Fernandez
Spare Copies

1923/40

GENERAL
ACCOUNT.

Gobt. of (1886) Madras.

PUBLIC WORKS.

Dated April, 21st.

Recd.

Encl.

G.O., 29th April 1886, No. 1084 W.

APRIL.

Budget Estimate

Imperial military works — for 1886-87.—
Orders circulating the final issue of the —.

GOVERNMENT OF MADRAS.
MILITARY DEPARTMENT.

Ordinance Department.

No. 1078.

From
THE SECRETARY TO GOVERNMENT, FORT ST. GEORGE,
MILITARY DEPARTMENT.

To
THE SECRETARY TO THE GOVERNMENT OF INDIA,
MILITARY DEPARTMENT.

SIR,

With reference to your letter No. 1337-D, dated 8th September 1885, I am directed to forward, for submission to the Right Honorable the Governor-General in Council, the correspondence marginally noted, and to state, with advertence to paras. 10 and 11 of the Quarter Master General's letter, that when the new magazine on the horn of the Wallajah Bastion of Fort St. George has been completed, and the fittings in the magazine at St. Thomas Mount have been altered (funds for both of which works have been allotted in the budget of the Public Works Department for 1886-87), no further accommodation will be necessary for the storage of gun-powder in the vicinity of Madras.

2. I am to state that this Government concur in opinion with the Provincial Commander-in-Chief that there is no urgent necessity for the removal of the Laboratory from its present situation in Fort St. George to a position closer to the Arsenal.

3. As soon as funds are available for the repair of the granary buildings on the beach, the work will be taken in hand in order that the old casemate barracks now occupied by the Commissariat Department may be handed over to the Ordnance Department for the storage of the carriages of the siege train and reserve batteries.

4. Adverting to para. 3 of your letter under acknowledgment, I am to inform you that the negotiations for the purchase of Raja Gajapathi Rau's house in Madras have fallen through, the amount sanctioned by the Government of India having been found insufficient for the completion of the work which must be carried out to render the building fit for the accommodation of the Military Accounts Offices.

5. It should be noted that, had this purchase been effected, the house would only have provided accommodation for the establishment of the Military Accounts Department, and that no building outside the fort has yet been found in which the

offices of the Accountant-General could be located. Accordingly it will be seen that the question of the removal of these offices from Fort St. George is still as far from solution as it was when first mooted.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) A. KENNEY-HERBERT, Lt.-Col.,
Secretary to Government.

No. 170. From Major D. J. S. McLEOD, Deputy Quarter Master General, to Lieutenant-Colonel A. KENNEY-HERBERT, Secretary to Government, Military Department; dated Ootacamund, 28th January 1886, No. 345-A.

In returning the letter of the Government of India as per margin forwarded for the opinion of the Provincial Commander-in-Chief under O.G., No. 5120, dated 16th September 1885, I have the honor, by order, to report that the Provincial Commander-in-Chief considers it most desirable that the carriages of the siege train and reserve batteries ordered to be maintained by the Ordnance Department in this Presidency should be stored within Fort St. George in a convenient situation with reference to the Arsenal, and he would suggest that the old casemate barracks, now used as store rooms by the Commissariat Department, should be made over to the Ordnance Department for the purpose.

2. The Inspector-General of Ordnance has approved of these casemates for the purpose, they being situated most conveniently in the vicinity of the Arsenal and being most suitably arranged.

3. General Rowlands regrets, however, that he finds himself unable to propose any redistribution of buildings within the fort, which would enable adequate provision of storage being made for the Laboratory of the Ordnance Department, or for the Commissariat stores displaced from the casemates to make way for the siege train carriages, &c.

4. Barrack accommodation for 884 single men is wanted in Fort St. George,* whereas existing barracks provide for only 577 men, so that, as matters stand, there is a deficiency of accommodation for 307 men.

5. The buildings to be obtained on the removal from the fort of the Civil and Military Account Offices will do no more than provide for at most 200 men, every part of the buildings being utilized and no portion left available for either Ordnance or Commissariat store purposes.

6. A hundred men or more of the British Infantry, when the regiment is at full strength, will therefore have to be kept detached at St. Thomas Mount, the nearest place where barracks are available, an arrangement which the Provincial Commander-in-Chief would be glad to avoid if by any redistribution of buildings he saw his way to increasing barrack accommodation in Fort St. George.

7. The Director-General of Ordnance mentions the Laboratory, but it is now within the limits of the fort, being placed in an out-work which is not to be removed, and General Rowlands believes there is no great urgency for its transfer to a position closer to the Arsenal.

8. The Commissary-General has been asked to try and find accommodation for the Commissariat stores, which the arrangements above suggested will displace, in some buildings now at his disposal, and it is hoped he will find this practicable; should it not be so, however, the Provincial Commander-in-Chief would propose the

construction of a new store room for the purpose in a convenient situation with reference to the rest of the Commissariat store rooms at Madras, it being in his opinion very desirable that the Commissariat stores, which need not of necessity be stored in the fort, should be provided for elsewhere to make way for Ordnance stores which ought to be kept within the fort and close to the Arsenal.

9. There remains only the question of magazine accommodation.

10. The Provincial Commander-in-Chief has been in communication with the Inspector-General of Ordnance on this subject, and in consultation with that officer has decided that the new magazine to be placed on the berm of the Wallajah Bastion of Fort St. George shall be constructed to contain 3,600 barrels of powder, which quantity, with 5,760 barrels to be stored in the magazine at St. Thomas Mount when its fittings are altered, will represent all the powder which the Ordnance Department consider necessary to be stored in the vicinity of Madras as detailed in margin.

	Barrels.
Fort armament, including powder for heavier guns to be placed on beach	5,387
Batteries	2,621
St. Thomas Mount	5,760
Total	13,768

11. Funds for the alteration of fittings in the magazine at St. Thomas Mount and for commencement of the new magazine on the berm of the Wallajah Bastion have been allotted in the budget of the Public Works Department for 1886-87, and the question of provision of storage accommodation for powder at Madras may, therefore, now be said to have been disposed of.

No. 704.

Referred for favor of very early report on paras. 1, 2 and 8 of the Quarter Master General's letter.

(By Order.)

Fort St. George, (Signed) A. KENNEY-HERBERT, Lt.-Col.,
1st February 1886. Secretary to Government.
To the Commissary-General.

No. 171. From Colonel H. P. HAWKES, Officiating Commissary-General, to Lieutenant-Colonel A. KENNEY-HERBERT, Secretary to Government, Military Department; dated Madras, 4th February 1886, No. 7001.

I have the honor to return the documents regarding accommodation for the Ordnance Department in Fort St. George referred to me with your docket No. 704, dated 1st February 1886.

2. In reply I have to report that I have for some time been in communication with the Quarter Master General and the General Officer Commanding the Eastern District in reference to the casemate barracks in the fort which are now occupied as store godowns by the Executive Commissariat Officer, but which the Provincial Commander-in-Chief wishes to transfer to the Inspector-General of Ordnance for the storage of the carriages, &c., of the siege train.

3. I am very willing to meet General Rowland's wishes, but it is obviously impossible to vacate the barracks in question until other accommodation is found for the Commissariat stores, as the Executive Officer has as much need of store rooms as the Commissary of Ordnance has. I suggested that the old adult school might be repaired and handed over to us, as it is not used and has been long unoccupied, but I was informed that it is to be used again for its "proper purpose" and cannot, therefore, be made available.

4. The Quarter Master General having definitely decided that there is no other available building in the fort, I was obliged to search outside, and I therefore told him that I would appropriate part of the Commissariat granary on the

beach as an executive godown, provided that funds could be found to put it into a state of repair.

5. The whole granary is in a state of dilapidation, and it has been in that condition for years past. Estimates for the needful repairs were prepared by the Executive Engineer long ago, but he has never been able to carry them out for want of funds. The Quarter Master General, however, now states that the Commander-in-Chief might be in a position to obtain funds for the work by re-appropriation out of the budget of 1886-87 before the final issue of that budget is made, and he thinks that "probably some Rs. 7,000 or so might be found if necessary."

6. I have accordingly asked the Executive Engineer to ascertain, in communication with the Executive Commissariat Officer, what sum of money is needed for the purpose in question, and there the matter rests at present, as I have received no reply up to date.

(True Copies.)

(Signed) A. KENNEY-HERBERT, Lt.-Col.,
Secretary to Government.

123980/9

Govt. of (1886) Madras.

MILITARY.

From
THE SECY. TO GOVT.,
FORT ST. GEORGE,
Military Department,
To
THE SECY. TO THE
GOVT. OF INDIA,
Military Department.

Dated February, 1886.

Issued

Recd.

Encl.

18th February 1886, No. 1078.

FEBRUARY.

Nos. 169-172.

Ordinance Department.

Ordinance Stores.—Correspondence affording information called for relative to the accommodation required in Fort St. George for —, forwarded, with remarks, to the Government of India.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount.	Total.
		RS.		RS.	RS.
1739	Cft of Dismantling hard brick work	6-4	100cft	109	
8550	Removing and refilling earth work in ramparts	10-8	100cft	89	
1033	Excavation	4-10		107	
110	Cft of Sinking wells 5 1/2 ft external Dia and 8 ft deep filled in with brick jelly and sand inclu- ding a wooden curb to well to be of 2 thicknesses of mango Slabs 5" thick each 40—		Each	1800	
9	No. Dia. 5 1/2 feet external Dia. and 8 feet deep—	28	Rs.	252	
12358	Cft of Hydraulic Concrete	25	100cft	3090	
11743	Limbo Concrete	14-4	Rs.	1464	
65824	Brick in shell line Mortar	15-10	Rs.	10385	
		6-0		22996	

Grand Total of Estimate ...

Executive Engineer.

CIRCLE— *Presidency*

DIVISION— *Madras*

ESTIMATE FORM.—Abstract.

(To accompany the Detailed Estimate No.
of 188 -8- for—)

Construction of a Magaz.
for accommodation of Ordnance
and Artillery Reserve at
Fort Saint George

* Here enter the name and description of work in full.

Int. 2/1/80
Dec 14 53
13/4/80

2/10 9441
1553

47 Cft of tiled arch work built in
lime mortar *19 44 mags* *9*

2295 Circular arch work *Do* *21 11 do* *487*

1837 Circular arch work built
moulded bricks in shell lime *26 11 do* *3283*
mortar

Centering the cost of arch work *11 11 do* *821*

76 Cft of Pallanam granite
stone 2 line dressed *2 11 Cft* *1672*

19 29 Square of Plastering with 2 coats
of Madras cement *6 11 59* *1221*

12 17 Do for ceiling *Do* *7 8 11* *226*

15 11 Plastering the ceiling with
2 coats of shell lime *11 11 11* *226*

7 29 Square of Flooring with asphalt
1/2" thick *1 11 11* *1120*

20 90 Gramp coarse with 1/2" thick
asphalt *11 11 11* *226*

La. O. *32255*

14.01 Square of Lead bearded flooring
between rails with light metal
all floor $\frac{3}{4}$ " thick planks rebated
on 3×4 " thick battens at 2" intervals
nails all brass fastenings 20 . . sft 701

14.02 Square of Graveling & thick wall
material and removed 2 12 . . 24

22059 Lft of Earth work for paving floor 2 12 . . mugs 127

247 Rft of Semicircular partition
ware pipe 3 . Rft 46

248 1/2" square 1/2" dia with
brass clamps 6 . 2 149

14 1/2" wrought iron rings 3" interior
Rft with bolts and the rings
to be covered with steel plates 6 . . Each 84

503 Rft of 1/2" thick concrete
brick on edge or abut of
concrete and plastering with 8 . . Rft 252

94 1/2" wrought iron round
shaft 3" dia and $\frac{1}{2}$ " thick
including fixing 1 . . 98
C. O. 33746

6 1/2" wooden plugs or tampons to close
the holes when the above wind
shaft be removed 3 . . Each 18
33746

12 1/2" of Lamp Room cast iron
with wrought iron doors brass
frames with $\frac{1}{2}$ " plate glass
protected with brass wire
netting in front and $\frac{3}{8}$ " brass
rod in rear lamp with fitting
complete Rates includes
making and fixing the whole
Complete with stone lintels
and Sills 100 . . do 1200

63 2 1/2" of 2" thick batten door
with frames brass or copper
hooks hinges bolts and other
brass fastenings Complete 2 8 . sft 158

49 Square ft of 1 1/2" thick batten doors
with frames iron hinges bolts
and other fastenings Complete 1 8 . sft 74

44 1 1/2" thick panelled doors
frames and iron
fastenings Complete 1 2 . do 457

1 1/2" of Perforated Iron sheets
 $\frac{1}{8}$ " thick 12 . do 221
C. O. 35874

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per.	Amount.	TOTAL.
3	Leak Barrans with locking rail brass hinges &c complete 10--	Each	30	367 50	
2	No of Had pegs to have 6 spigs each including fixing	Do	6	367 70	
1522 1/2	Left of Teak wood wrought iron paluph	cf	600		
15 1/2	Fixing racks with brass screws &c	Do	78		
2	No. Shifting 2 Embrazures and ground flat foron &c in left flank of Saint George Bastion	Do	200		
2	No. of Extra work for building 2 circular arches in msh wall of Magazine for fixing 2 Black man latents Air Propellers and Ventilators	Each	26		
	Contingencies at 5 percent			21 60	
	Petty Supervision at 2 1/2 percent			10 80	

Approved: *[Signature]*

By order: *[Signature]*

Dr. Mr. Genl. Office 2

Dr. Mr. Galt, Dec 2 }
Do. Do. Do. Do. Do. }
30th April 88 }

Grand Total of Estimate ..	46440
----------------------------	-------

STATION *Bangalore*
Dated *Apr 6 1886.*

Washington
Executive Engineer.
Presidency
Subsiding just

REFERENCE TO MADRAS P. W. D. CODE.

AS. 1074, 1075, 1080, 1087, 1091 to 1094, 1108,
1111 to 1114, 1130 AND 1145 to 1147.

P. W. D. FORM.
No. M. 207.

CIRCLE—

DIVISION—

ESTIMATE FORM.—Abstract.

(To accompany the Detailed Estimate No.
of 188 -8 for*)

* Here enter the name and description of work in full.

Ans 14-51
13/4/86

FINAL ISSUE.

IMPERIAL
MILITARY WORKS.

1239800
14
MADRAS.

PUBLIC WORKS DEPARTMENT.

IMPERIAL BUDGET-ESTIMATE

OF

MILITARY WORKS

OF THE

GOVERNMENT OF MADRAS

FOR THE YEAR

1886-87.

CHEPÂK,
29th April 1886.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Government, P.W.D.

1132840
15

CONTENTS.

	PAGE
ABSTRACT OF THE BUDGET-ESTIMATE OF REVENUE	2
DITTO DITTO OF EXPENDITURE	3
DETAILS OF THE BUDGET-ESTIMATE OF EXPENDITURE—	
PART I.—DETAIL OF ESTIMATE FOR ORIGINAL WORKS, CLASS A	4 & 5
DITTO DITTO CLASS B	6 & 7
APPENDIX TO ABOVE—	
APPENDIX B.—LIST OF CLASS C WORKS	8 to 13

IMPERIAL
MILITARY WORKS.

MADRAS.

REVENUE.

ABSTRACT OF THE BUDGET-ESTIMATE OF REVENUE OF THE PUBLIC WORKS DEPARTMENT FROM
MILITARY WORKS IN MADRAS FROM 1st APRIL 1886 TO 31st MARCH 1887.

	BUDGET- ESTIMATE, 1886-87.	REVISED ESTIMATE, 1885-86.	BUDGET- ESTIMATE, 1885-86.	ACTUALS, 1884-85.
	Rs.	Rs.	Rs.	Rs.
In Public Works Department	30,000	29,500	29,500	33,586
In Civil and Military Departments	...	...	...	...
Total	30,000	29,500	29,500	33,586

CHARGES.

ABSTRACT OF THE BUDGET-ESTIMATE OF EXPENDITURE OF THE PUBLIC WORKS DEPARTMENT OF
MILITARY WORKS IN MADRAS FOR THE YEAR FROM 1st APRIL 1886 TO 31st MARCH 1887.

	REFERENCE TO DETAILED ESTIMATE.	BUDGET- ESTIMATE, 1886-87.	REVISED ESTIMATE, 1885-86.	BUDGET- ESTIMATE, 1885-86.	ACTUALS, 1884-85.
		Rs.	Rs.	Rs.	Rs.
ORIGINAL WORKS.	In progress	58,996	1,89,204	2,29,646	2,09,361
	Not commenced.	1,49,039			
REPAIRS	Ordinary	3,10,465	1,72,995	2,94,549	2,83,366
	Special	...			
ESTABLISHMENT	...	1,20,700	84,205	1,20,563	1,14,345
TOOLS AND PLANT	...	5,200	3,596	5,242	4,935
SUSPENSE ACCOUNT	...	...	...	...	...
Total	...	6,44,400	4,50,000	6,50,900	6,12,007

IMPERIAL
MILITARY WORKS.

MADRAS.

1237840
76

ABSTRACT OF THE CHARGES TO BE INCURRED BY THE PUBLIC WORKS DEPARTMENT FROM IMPERIAL
FUNDS AND CONTRIBUTIONS IN BOTH INDIA AND ENGLAND.

	BUDGET-ESTIMATE, 1886-87.							REVISED ESTIMATE, 1885-86.	BUDGET-ESTIMATE, 1885-86.	ACTUALS, 1884-85.
	ORIGINAL WORKS.			REPAIRS.	ESTABLISHMENT.	TOOLS AND PLANT.	SUSPENSE ACCOUNT. BARRACK DEPARTMENT.	TOTAL.		
	In progress.	Not commenced.	Total.							
PROVISION FROM IMPERIAL FUNDS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. Rs.	Rs.	Rs.	Rs.
In India	58,996	1,49,039	2,08,035	3,10,465	1,20,700	5,200	...	6,44,400	4,50,000	6,50,000
In England.	...	...	...	...	...	...	...	...	...	250
Total	58,996	1,49,039	2,08,035	3,10,465	1,20,700	5,200	...	6,44,400	4,50,000	6,50,000
PROVISION FROM CONTRIBUTIONS.										
In India	...	...	...	...	...	...	...	...	...	261
GRAND TOTAL.	58,996	1,49,039	2,08,035	3,10,465	1,20,700	5,200	...	6,44,400	4,50,000	6,50,000

STATEMENT SHOWING THE WORKS ON WHICH THE OUTLAY IN ENGLAND ABOVE PROVIDED FOR IS TO BE INCURRED.

	BUDGET-ESTIMATE, 1886-87.						REVISED ESTIMATE, 1885-86.	BUDGET-ESTIMATE, 1885-86.	ACTUALS, 1884-85.
	ORIGINAL WORKS.			TOOLS AND PLANT.	SUSPENSE ACCOUNT.	TOTAL.			
	In progress.	Not commenced.	Total.						
	...	...	...	...	...	...	...	...	250
Total	...	...	...	...	...	...	...	...	250

IMPERIAL
MILITARY WORKS.

PART
DETAIL OF THE BUDGET-ESTIMATE FOR
CLASS A

HEAD OF CLASSIFICATION.	EXECUTIVE DIVISION.	LOCALITY.	ITEM No.	PROJECTS AND WORKS.	AMOUNT OF ESTIMATE.
				IMPERIAL ORDINARY.	Rs.
				MILITARY.	
				Original Works.	
(1) Accommodation for troops— Buildings for European troops in the plains. Permanent.	West Coast.	Malapattanam ...	1	Constructing a barracks for a detachment of British Infantry to accommodate 100 men.	1,35,094
	Chingleput.	St. Thomas' Mount.	2	New barracks for Royal Artillery...	1,46,910
	Do. ...	Do. ...	3	Constructing six blocks of stables for two field batteries of Royal Artillery.	21,702
(2) Ordnance Works ...	Presidency.	Fort St. George	4	Armament of Fort St. George ...	42,035
(4) Fortifications ...	Do. ...	Madras ...	5	Alterations to the Coast Batteries.	14,265
	Do. ...	Bangalore ...	6	Fortified post at Agram ...	39,180
				Total ...	...

[4]

MADRAS.

L
ORIGINAL WORKS FOR THE YEAR 1886-87.
WORKS.

OUTLAY.		GRANT, 1886-87.			ITEM No.	REMARKS AND REFERENCES.
Actual to end of 1884-85.	Probable during 1885-86.	Works in progress.	Works not commenced.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
82,531	31,448	20,115	...		1	G.O., No. 2845 W., dated 27th November 1885. Item No. 2, class A works, budget of 1885-86.
97,379	22,458	27,078	...		2	G.O., No. 1274 W., dated 2nd June 1885. Item No. 1, class A works, budget of 1885-86.
16,600	10,753	939	...	48,127	3	G.O., No. 2561 W., dated 2nd November 1885. Item No. 2, class B works, budget of 1885-86.
8,036	29,935	2,964	...	2,964	4	G.O., No. 2970 W., dated 19th October 1885. Item No. 4, class A works, budget of 1885-86.
...	5,265	6,025	...		5	G.O., No. 2126 W., dated 11th September 1885.
34,467	3,020	1,880	...	7,905	6	G.Os., Nos. 3059 W., dated 18th December 1885 and 250 W., dated 28th January 1886.
...	...	58,996	...	58,996		

[5]

IMPERIAL
MILITARY WORKS.

PART
DETAIL OF THE BUDGET-ESTIMATE FOR
CLASS B

HEAD OF CLASSIFICATION.	EXECUTIVE DIVISION.	LOCALITY.	ITEM No.	PROJECTS AND WORKS.	AMOUNT OF ESTIMATE.
IMPERIAL ORDINARY.					Rs.
MILITARY.					
<i>Original Works.</i>					
(1) <i>Accommodation for troops—</i>	Bellary ...	Bellary ...	1	Reconstructing double apothecaries' quarters, station hospital.	6,222
<i>Buildings for European troops in the plains. Permanent.</i>	Nagari ...	Wellington ...	2	Hospital accommodation for women and children.	2,035
	Presidency ...	Fort St. George ...	3	Improving water-supply ...	6,445
	Do. ...	Do. ...	4	Alterations and additions to blocks of married quarters and to the buildings occupied by the offices of the Surgeon-General, &c.	...
	Do. ...	Bangalore ...	5	Stables for 66 extra horses, British Cavalry.	...
	Do. ...	Do. ...	6	Alterations to the British Cavalry Barracks.	...
	Do. ...	Bangalore ...	7	Additions to the Military prison ...	8,325
	Chingleput ...	St. Thomas' Mount ...	8	Constructing a coffee shop with kitchen for the upper story barracks.	6,599
	Do. ...	Do. ...	9	Improvements to the old barracks.	...
<i>Buildings for Native troops.</i>	West Coast ...	Quilon ...	10	Constructing a regimental store-shed.	9,334
	Presidency ...	Bangalore ...	11	Public buildings for one regiment of Native Infantry.	21,636
	Tondiarpet ...	Tondiarpet ...	12	Erection of a Magazine for one regiment of Madras Infantry.	...
	Do. ...	Do. ...	13	Construction of stone drains required for new lines.	...
(2) <i>Ordnance Works.</i>	Presidency ...	Fort St. George ...	14	Constructing a new magazine in the Wallajah bern.	...
	Do. ...	Madras ...	15	New wheelers shop, Gun Carriage Factory.	7,370
	Chingleput ...	St. Thomas' Mount ...	16	Alterations to racks in the Ordnance Magazine.	3,505
			17	Minor works ...	...
Total ...					...
Grand Total ...					...

MADRAS.

1229840/8

I—cont.
ORIGINAL WORKS FOR THE YEAR 1886-87.
WORKS.

OUTLAY.		GRANT, 1886-87.			ITEM No.	REMARKS AND REFERENCES.
Actual to end of 1884-85.	Probable during 1885-86.	Works in progress.	Works not commenced.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
...	...	...	6,222	...	1	G.O., No. 1806 W., dated 3rd August 1885.
...	...	...	3,035	...	2	G.O., No. 1573 W., dated 6th July 1885, Item No. 15, class C works, budget of 1885-86.
...	...	...	6,445	...	3	G.O., No. 2454 W., dated 20th October 1885.
...	...	...	20,160	...	4	Estimate is awaited.
...	...	...	5,212	...	5	Do. do.
...	...	...	1,210	...	6	Do. do.
...	...	...	8,325	...	7	G.O., No. 938 W., dated 5th April 1884, Item No. 3, class B works, budget of 1885-86.
...	...	...	4,320	...	8	G.O., No. 1390 W., dated 15th June 1885.
...	...	...	8,870	63,830	9	Estimate is awaited.
...	...	...	9,334	...	10	G.O., No. 1556 W., dated 3rd July 1885, Item No. 32, class C works, budget of 1885-86.
...	...	...	10,000	...	11	G.O., No. 2952 W., dated 29th November 1884, Item No. 27, class C works, budget of 1885-86.
...	...	...	2,500	...	12	Estimate is awaited.
...	...	...	7,500	...	13	Do. do.
...	...	...	20,000	28,334	14	Do. do.
...	...	...	7,370	...	15	G.O., No. 2870 W., dated 17th November 1884, Item No. 36, class C works, budget of 1885-86.
...	...	...	2,505	...	16	G.O., No. 2416 W., dated 15th October 1885.
...	...	...	27,000	29,875	17	
...	...	...	1,49,039	1,49,039		
...	...	...	...	2,08,035		

IMPERIAL
MILITARY WORKS.

APPENDIX

LIST OF WORKS (OR CLASS C WORKS) OMITTED FROM THE BUDGET-ESTIMATE OF 1886-87, SET ON CLASS B

HEAD OF CLASSIFICATION	REVENUE DEPARTMENT	LOCALITY	ITEM No.	PROJECTS AND WORKS	AMOUNT OF ESTIMATE
IMPERIAL ORDINARY.					R.
MILITARY.					
Original Works.					
(1) Accommodation for troops—	Bellary	Bellary	1	Improving the system of water-supply to British Infantry Barracks.	...
Buildings for European troops in the plains. Permanent.	Do.	Do.	2	Alterations to prisons and adjoining buildings.	...
	Do.	Do.	3	New gunshed with rollers and wheels' shop for the Royal Artillery.	2,563
	Do.	Do.	4	Swimming-bath, British Infantry.	2,745
	Do.	Do.	5	Infectious disease ward, station hospital.	4,140
	Do.	Do.	6	Armourer's shop, 2nd Light Cavalry.	2,695
	Nilgiri	Wellington	7	Gymnasium.	...
	Do.	Do.	8	Drinking-water to be laid on to hospital.	2,226
	Do.	Do.	9	Lock hospital.	...
	Do.	Do.	10	Constructing quarters with out-houses for a Barrack Sergeant.	7,348
	West Coast.	Cannanore	11	Plunge-bath for British Infantry.	4,640
	Do.	Do.	12	Improving latrines for British Infantry.	2,780
	Presidency.	Fort St. George	13	Drainage of fort and barracks.	...
	Do.	Do.	14	Wash-house outside the barracks.	...
	Do.	Do.	15	Garrison bazars to be done away with and new cook-houses built.	...
	Do.	Do.	16	Converting A, B, C, and D blocks into barracks and quarters for a regiment of British Infantry and Garrison Battery of Royal Artillery.	...
	Do.	Do.	17	Converting a racket court into a covered gymnasium.	11,820
	Do.	Do.	18	Alterations necessary towards rendering the offices of the Asst. Quarter-General and Controller of Military Accounts suitable for occupation by troops.	...
	Do.	Bengalore	19	Schoolmaster and messengers' quarters, Royal Artillery.	...
	Do.	Do.	20	Quarters for the senior apothecary, north station hospital.	5,300
Carried over					...

MADRAS.

B.

WHICH EXPENDITURE MAY BE INCURRED DURING THE YEAR BY RE-APPROPRIATION FROM WORKS.

OUTLAY.		AMOUNT APPLIED FOR 1886-87.			ITEM No.	REMARKS AND REFERENCES.
Actual to end of 1884-85.	Probable during 1885-86.	Works in progress.	Works not commenced.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
...	...	...	5,350	...	1	Estimate is awaited.
...	...	...	11,260	...	2	Do. do.
...	...	...	5,663	...	3	G.O., No. 914 W., dated 3rd April 1884.
...	...	...	5,000	...	4	G.O., No. 2434 W., dated 19th October 1885.
...	...	...	5,000	...	5	G.O., No. 330 W., dated 7th February 1884.
...	...	...	2,695	...	6	G.O., No. 2266 W., dated 14th September 1881. Item No. 5, Class B works, budget of 1885-86.
...	...	...	10,000	...	7	Estimate is awaited.
...	...	...	5,000	...	8	G.O., No. 893 W., dated 2nd April 1886.
...	...	...	4,180	...	9	Estimate is awaited.
...	...	...	7,348	...	10	G.O., No. 1941 W., dated 21st August 1885.
...	...	...	4,640	...	11	G.O., No. 418, dated 16th February 1876.
...	...	...	2,780	...	12	G.O., No. 1956, dated 4th April 1879.
...	...	...	10,000	...	13	Estimate is awaited.
...	...	...	2,500	...	14	Do. do.
...	...	...	4,500	...	15	Do. do.
...	...	...	4,200	...	16	Do. do.
...	2,000	9,890	...	...	17	G.O., No. 1552 W., dated 20th June 1884. Item No. 1, class B works, budget of 1885-86.
...	...	...	40,000	...	18	Estimate is awaited.
...	...	...	6,200	...	19	Estimate is awaited.
...	...	...	5,300	...	20	G.O., No. 3385 W., dated 27th November 1883.
...	...	9,890	1,41,616	...		

IMPERIAL
MILITARY WORKS.

APPENDIX

LIST OF WORKS (or CLASS C WORKS) DERIVED FROM THE BUDGET-ESTIMATE OF 1885-87, BUT OF CLASS B.

HEAD OF CLASSIFICATION	ESTIMATE DIVISION	LOCALITY	ITEM No.	DESCRIPTION AND WORKS	AMOUNT OF ESTIMATE
				Brought forward ...	Rs.
				IMPERIAL ORDINARY— cont.	
				MILITARY—cont.	
				Original Works—cont.	
(1) Accommodation for troops—	Presidency	Bangalore	21	Quarters for the assistant apothecary, north station hospital.	4,773
Buildings for European troops in the plains. Permanent.	Do.	Do.	22	Constructing a fourth-class gunnery.	44,600
	Do.	Do.	23	Parade barracks—alterations and additions to wash-houses.	12,500
	Chingleput	S. Thomas' Mount.	24	A wheelwright and callmaker's shop for the new Artillery barracks.	5,660
	Do.	Do.	25	Raising the roof of harness room, troop lines.	4,200
	Do.	Do.	26	Wooden shed at the proof range ...	2,320
	Do.	Do.	27	Converting the disused gashed into a coffee shop, recreation room and library.	2,520
	Do.	Pallavaram	28	Mortuary rooms for hospital.	...
	Do.	Do.	29	Constructing an armourer's shop.	2,880
	Do.	Poonamallee.	30	Constructing a new double storied barracks.	1,66,885
	Do.	Do.	31	Providing lightning conductors to the hospital.	...
Accommodation for Native Troops.	Vizagapatam	Vizianagaram	32	Regimental store-room for Native Infantry.	3,480
	Bellary	Bellary	33	School-house for a Regiment, Native Infantry.	3,030
	Presidency	Madras (Ráya-puram)	34	Flushing drains for Native Infantry lines.	4,360
	Do.	Bangalore	35	Store-rooms and workshops for the Pioneer Regiment.	...
	Do.	Bangalore	36	Public buildings for a regiment of Native Cavalry.	23,490
	Trichinopoly	Trichinopoly	37	Public buildings for two regiments of Native Infantry.	35,350
	Chingleput	Pallavaram	38	Powder Magazine for a Native Infantry Regiment.	4,900
(2) Ordnance Works.	Presidency	Madras	39	Wall round the Gunpowder Factory.	...
				Carried over ...	...

MADRAS.

B—cont.

WHICH EXPENDITURE MAY BE INCURRED DURING THE YEAR BY RE-APPROPRIATION FROM WORKS—cont.

OUTLAY.		AMOUNT APPLIED FOR 1886-87.			ITEM No.	REMARKS AND REFERENCES.
Actual to end of 1884-85.	Probable during 1885-86.	Works in progress.	Works not commenced.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.		
...	...	9,890	1,41,616	...		
...	...	...	4,773	...	21	G.O., No. 938 W., dated 5th April 1884.
1,788	...	42,812	...	...	22	G.O., No. 1560, dated 21st June 1876.
7,946	...	4,554	...	...	23	G.O., No. 1102 W., dated 7th May 1880.
...	...	...	5,660	...	24	G.O., No. 2717 W., dated 3rd November 1884.
...	...	...	4,200	...	25	G.O., No. 3187 W., dated 17th December 1881.
...	...	...	2,820	...	26	G.O., No. 3077 W., dated 13th December 1884.
...	...	...	2,520	...	27	G.O., No. 1234 W., dated 28th May 1885.
...	...	...	3,000	...	28	Estimate is awaited.
...	...	...	2,880	...	29	G.O., No. 3149 W., dated 22nd December 1884.
6,854	...	20,000	...	...	30	G.O., No. 465 W., dated 19th February 1879.
...	...	...	3,000	...	31	Estimate is awaited.
...	...	...	3,480	2,47,725	32	G.O., No. 2628 W., dated 27th October 1884.
...	...	...	3,030	...	33	G.O., No. 149 W., dated 17th January 1884.
...	...	...	4,300	...	34	G.O., No. 1937 W., dated 4th June 1884.
...	...	...	3,000	...	35	Estimate is awaited.
...	...	...	14,000	...	36	G.O., No. 1552 W., dated 20th June 1884. Item No. 4, Class B. Works, Budget of 1885-86.
12,739	3,370	18,000	...	...	37	G.O., No. 2194 W., dated 5th September 1884. Item No. 3 Class A Works, Budget of 1885-86.
...	...	...	4,500	50,310	38	G.O., No. 334 W., dated 18th February 1886.
...	...	...	10,000	...	39	Estimate is awaited.
...	...	95,256	2,12,779	...		

IMPERIAL
MILITARY WORKS.

APPENDIX
LIST OF WORKS (OR CLASS C WORKS) OMISSION FROM THE BUDGET-ESTIMATE OF 1886-87, NOT ON
CLASS B

HEAD OF CLASSIFICATION.	EXECUTIVE DIVISION.	LOCALITY.	ITEM No.	PROJECTS AND WORKS.	AMOUNT OF ESTIMATE.
				Brought forward ...	Rs. ...
				IMPERIAL ORDINARY— <i>cont.</i>	
				MILITARY— <i>cont.</i>	
				Original Works— <i>cont.</i>	
(2) Ordnance Works.	Presidency.	Madras	40	Extra accommodation as store-room in the Gun Carriage Factory.	...
	Do.	Do.	41	Improvements to the barrel machine shop of the Gun Carriage Factory.	4,030
	Do.	Do.	42	Improvements to the Gunpowder Factory.	2,32,412
	Do.	Do.	43	Dried deposit magazine, Gunpowder Factory.	3,975
	Do.	Do.	44	One drying house for store.	...
	Do.	Do.	45	Alterations to the roof of the final drying-house.	...
	Do.	Tenampet	46	Constructing a wheat godown.	...
	Do.	Bangalore	47	Ordnance depot buildings, Entrenchment.	...
(4) Commercial Buildings.	Do.	Madras	48	Constructing a shed in the Camp Equipage Depot.	...
	Do.	Do.	49	Lanes for transport attendants	...
	Do.	Do.	50	Workshops and sheds for carts, coolies, &c., Transport Department.	...
	Do.	Bangalore	51	Quarters for a Conductor, Transport Department.	5,800
	Chingleput.	Guindy	52	Quarters for a station butcher	...
Fortifications.	Presidency.	Fort St. George	53	Demolition of Wallajah Ravelin and two lunettes.	...
	North Arcot.	Vellore	54	Draw bridge and gate for the fort.	6,450
Miscellaneous.	Nilgiri	Ootacamund, Loydala.	55	Water-supply, Lawrence Asylum.	...
				Total ...	...

MADRAS.

B—*concl.*

WHICH EXPENDITURE MAY BE INCURRED DURING THE YEAR BY RE-APPROPRIATION FROM WORKS—*concl.*

OUTLAY.		AMOUNT APPLIED FOR 1886-87.			ITEM No.	REMARKS AND REFERENCES.
Actual to end of 1884-85.	Probable during 1885-86.	Works in progress.	Works not commenced.	Total		
Rs.	Rs.	Rs.	Rs.	Rs.		
...	...	95,256	2,12,779	...		
...	...	...	6,000	...	40	Estimate is awaited.
1,969	...	2,061	...	...	41	G.O., No. 2413 W., dated 16th September 1882.
2,23,985	2,000	20,000	...	...	42	G.O., No. 2707 W., dated 3rd November 1884. Item No. 5, Class A works, budget of 1885-86.
...	...	...	3,975	...	43	G.O., No. 302 W., dated 21st April 1885.
...	...	...	26,320	...	44	Estimate is awaited.
...	...	...	4,300	...	45	Do. do.
...	...	...	5,950	...	46	Do. do.
...	...	...	4,823	...	47	Do. do.
...	...	...	5,300	83,429	48	Do. do.
...	...	...	48,000	...	49	Do. do.
...	...	...	5,500	...	50	Do. do.
...	...	...	4,220	...	51	G.O., No. 992 W., dated 16th April 1886.
...	...	...	4,740	...	52	Estimate is awaited.
...	...	...	7,434	67,760	53	Do. do.
...	...	...	6,450	...	54	G.O., No. 528 W., dated 7th March 1885.
...	...	...	7,000	13,884	55	Estimate is awaited.
...	...	...	...	7,000		
...	...	1,17,317	3,52,791	4,70,108		

Barracks and Buildings
Estimates.

No. 1675.A.

QUARTER MASTER GENERAL'S OFFICE,
Ootacamund, 30th April 1886.

From

THE QUARTER MASTER GENERAL,

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

Sir,

I have the honor, by order, to forward for sanction and transfer to the Public Works Department for disposal, the estimates plans &c., below-mentioned which have been approved by the Commander-in-Chief. The plans and estimates have been countersigned.

Abstract and detailed Estimates, amounting to Rs. 46420/- for constructing a magazine for the accommodation of Ordnance and Artillery Reserve Powder, on the Wallajah Beru, Fort Saint George, capable of holding 3000 barrels, with 2 plans, Report and Specifications.

2. The necessity for this work has already been explained in paras 9 et seq. of this Office letter no: 345 A of 28th January 1886 and in para 4 of letter no: 1540 A of 6th instant to Secretary to Government P.W.D. (Through Military Department.)

I have the honor to be
Sir

Your obedt. Servant
L. H. H. H.

Colonel B

Offg. Q. M. General B

1239840
23

July 1886. Sept

From

THE QUARTER MASTER GENERAL,

To

THE Secy. to Govt.
M. D.

2538 Approved
and transferred to the
Public Works Department
for disposal.

(By order)

Thames Street
Secretary to Government

Approved
1st May 1886

Dated 30th April

Received 31

Recd. 3/5/86

ENCLOSURES. 7. (1 plan).

Forward Estimate, plan
see for cost of a magazine
on the Wallagah River, Fort
St. George.

I have prepared
according to a statement
made in a letter
sent

6/5/86

As the 2 letters
refer to S.D. &
have been received
I cannot settle the
matter.

It appears that the
Magazine shows
has 5582 barrels
while it has not
been designed for
3000 barrels

8/5/86

including

letter has been traced
It is printed in 8
1834. v. 3. 27. 4. 6 (p
page 47). The other
letters cannot be
traced although
careful search
has been made
for it.

The other letter has
at last been found
and is sent to you
with the found in the
p. by attached to
this v. 3. 27. 4. 6
with your note
to be copied.

I cannot find any
of the letter men-
tioned by Claude
Barton in his report
& without there it
is impossible to say if
the Magazine was
intended to hold
300 barrels or the
reason why it was to
contain that quantity.
However the advice
has been given
of the Military au-
thorities and the
of course means that
they have approved
the design.

I have gone carefully
over the plans and
they seem to be well
prepared and to

meet all requirements.
The work is becoming
expensive and should
there be a chance of
anything arising in
future which may
necessitate more funds
being used, such as
larger guns to replace
those now in the batteries,
it would be better
to make this magazine
capable of holding a
large quantity, as the
cost would be trifling,
while to build another
magazine would be
expensive.

—
10/5/86

Order fixing 3000 barrels
has once been found & it
appears that the quantity
provided for heavier guns in
the beach batteries

—
10/5/86

including

To W. ^{all}
22/8/27

Plan certificate for
a magazine in the Wallajah
River, Fort St George.

There is nothing in
the Report & Specification,
nor in the note by Technical
Branch, to show whether
the project has been drawn
up in accordance with the
Standard.
authorised designs. D.W.'s
inquiry on this point, &
G.S. 86, is not answered.

If not based on
Standard designs, the
project must go to the
Govt. of India for sanction,
though it may in other
respects be within the
powers of this Govt. - vide
para 1310, P.W. Code.

In their Resolution
printed with G.O. 29.4.86,
No 10324 W, para 3, clause
IV, the G. & S. directed
that this work should
not be commenced without

their reaction.

In any case therefore
it will be well to send
up the project.

Draft submitted
for approval.

As
12.5.86



Public Works Department, 1886-87.

Current No. 3336

Letter No. 2638

Dated the 1st May 1886

From the Military Department

1933/500
28

NOTE OF REMARKS.

1. The accompanying plan & estimates provide for constructing a Magazine for the accommodation of Ordnance and Artillery Reserve Bombs, on the Wallajah Bazar, Fort St. George capable of holding 3000 barrels.

The amount of estimate in Rupees Rs. 420

2. 115 Wells of 5 1/2 ft. external diameter & 8 ft. deep are to be sunk (below ground level) and filled in with sand & brick jelly including

10.5.86. 15.5.86.

10.5.86. 15.5.86.
Resolved to 10.5.86. 15.5.86.

- including mango wooden cutts.
3. A bed of hydraulic concrete is used under foundations.
 4. The masonry of the foundation + superstructure are of brick in shell lime mortar.
 5. The roof of the building is bomb proof, the flat and small circular arches are of ordinary bricks and that of the large are of table moulded bricks in shell lime mortar.
 6. The plastering to the inside of magazine, soffits of roof arches are of cement + that of the spandrel arches is of Chinam plaster.
 7. The flooring of the magazine as well as over concrete roof is

1939500
1879

- $\frac{3}{4}$ " asphalt, and teak boarded flooring between racks with $\frac{3}{4}$ " teak planks, rebated + screwed with brass screws on teak battens is provided.
8. Leak wood racks for barrels are provided.
 9. Lightning conductor for the building, drain over roof along the foot of parapets + surface drain around the foot of the building are provided.
 10. Most of the rates agree with the District schedule.
 11. The report + specification have been submitted.
 12. The plan and estimates have been countersigned by the offg. Dns. Master General and approved.

approved by the Military
Department

The two letters quoted by
Q. M. G. in para 2 have
not been recd. I have
written to Ooty about them.

J. H.
B. S. B.

The letter to the
Governor has been
forwarded but the letter
to the Ooty has not.

No. 1237 W.

13/5/86
Public Works Department

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 17th May 1886

Read the following

From the Secy to Govt. No. 16754 of 30.4.86
Subj. from the King Dept. - 2638 of 1.5.86.

Ordered to be
forwarded for the early
fruition of the Govt.
of India, with reference
to para 3 (iv) of their
Resolution No. 445 M. W.
dated 24 March 1886,
and para 4 of the Pro.
of this Govt. No. 1094 W
dated 29 April 1886.

H. S. No. 1240 W of 17th May 1886

To Mr. S. E. V. C. C. C.

Secy to Govt.
Military Dept.

Decy

22/5/86

Forwarded

15/5/86

W. S. B.

12-5-86

137800
34

Govt. of 1883 Madras.

PUBLIC WORKS.

Phil. Lure

18/5/81

17 May 1883 No. 1239
1240

Magazine

Net - in the Wallajah
Barren, Fort St. George

and sent from the
for custody of the
forwarded for
of the fort of Madras.

Magazine

Net - in the Wallajah
Barren, Fort St. George

Plan & list of the
forwarded for
of the fort of Madras.

21/5/81