M.R.O. 1—22 400—22-11-30

MADRAS RECORD OFFICE.

Government of Madras.

Political Dept. DEPARTMENT.

G.O. No. 2271 Press Mis.

Dated 5 — 12 — 1857

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 8th December 1857.

No. 67. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 19th November 1857, No. 5347.

SIR,

1 Letter from the Garrison Engineer No. 409½, dated 12th October 1857.
1 Copy of letter from Principal Commissary of Ordnance to Inspector General of Ordnance, dated 9th October 1857, No. 2711.
1 Letter from the Garrison Engineer No. 463, dated 10th November 1857.
2 Abstract estimates.
3 Plans.

8

With reference to Extract from the Minutes of Consultation No. 806, dated 28th April 1857, I have the honor to forward for submission to Government and entry in the Budget of 1858-59, Plans and Estimates for constructing a range of buildings as a Factory for making Minie Bullets &c., on the site of the old House of Correction, in one of the Bastions of the Black Town fortifications.

2. The first of these estimates amounts to Rupees (27,000) twenty-seven thousand, providing for the buildings themselves at a very much greater expense than was contemplated at first, which increase is owing as explained by Captain Rawlins, to the additional Machinery for Friction tubes, fuses &c., since required to be put up, in order to be worked by one Engine and Shaft; the whole of the shafting that will be ultimately required has not been received from England, but what is ready 31 feet in length will be set up and used at once.

3. The Plans and Estimates have been carefully prepared in communication with Mr. Broughton the Mechanical Engineer, and appear to be in all respects satisfactory and highly creditable to Captain Rawlins, whose diligence and solicitude have been very conspicuous and I think successful.

4. The second estimate Rupees (13,000) thirteen thousand, prepared in conformity to the wishes of the Inspector General of Ordnance, provides for the construction of a loopholed wall with Banquette, in front of the entrance to the Minie Bullet Factory, and the clearance of a considerable space inside, by the removal of certain buildings.

5. Of the expediency, not to say necessity, of this defensive work, for the protection of this very important Manufactory, I need express no doubt, and I may only add my approval of its constructive details, and rates of the estimates.

6. Thus the aggregate expense of the works of the Minie Bullet Factory will be Rupees (40,000) forty thousand, and those of the buildings themselves are now in progress.

7. I should however remark that to these estimates will probably be hereafter added others, for quarters for Ordnance Staff attached to the Factory, for whom no provision is now made, but whose residence in the vicinity is considered by the Principal Commissary of Ordnance highly advisable if not indeed indispensable.

8. The rates are moderate and sufficient, and I recommend the estimates for the favorable consideration of Government.

Letter from Captain H. W. RAWLINS, Garrison Engineer; to Colonel C. E. FABER, Chief Engineer, dated 10th November 1857, No. 463.

SIR,

In obedience to the orders communicated in an Official Memorandum from the Superintending Engineer of the Central Circle, dated the 31st Ultimo, I have the honor to submit a Supplemental Plan and Estimate, amounting to Rupees (13,000) thirteen thousand, for enclosing by a loopholed wall some additional ground proposed to be attached to the south front of the Minie Bullet Factory.

2. The plan has been approved of by the Inspector General of Ordnance and Magazines. The area enclosed amounts to 3,959 square yards, exclusive of the ground required for turning the road around the building. I have allowed Rupees 4,000 for the purchase of the houses

	Rs.
900 Running feet of fortified wall around the rear of the Bastion, enclosing 10,000 superficial yards, at 15 Rupees per running foot.....	13,500
Two Bastions, on the south. so built as to be appropriated to Serjeant's Quarters, at 2,500 Rupees each.....	5,000
Strong double gate.....	900
Inside wall to gorge of Bastion and inside gate.....	2,000
Office required for the Superintending Officer.....	1,500
Value of 38 grounds of land to be purchased at 200 Rupees per ground	7,600
Value of houses thereon.....	4,400
Turning road and re-making.....	1,000
Sundries.....	1,100
Total.....	37,000

No. 68. ORDER THEREON, No. 2271; dated 7th December 1857.

Ordered to be referred to the Military Department.

(Signed) H. FORBES,
Acting Secretary to Government.

No 2711

Ordnance Department

From

Colonel D Hamond

Principal Commissary of Ordnance

To

The Inspector General

of Ordnance and Magazines

Sir

As the building in which the Machinery for making up Minie Rifle Ballitoes to be placed is now on a much more extensive scale than was originally contemplated owing to the Indian Lube and Edge cutting Machinery which are also to be worked by the Steam Engine, having been subsequently sent from England, whereby a greater extent of building became necessary, in order to work the additional Machinery, as well as for the accommodation of the Stores attached thereto, I have the honor to bring to your notice that as so much money is to be spent on this building intended for these important Establishments the Family Dwellings of which are of so much consequence to the efficiency of the Army it appears to me expedient that a few additional Rupees should not be spared to render the Manufactory complete in every respect I therefore beg to offer the following suggestions which if carried out will I think effect

the

required to be demolished ; and I believe this sum will be ample to cover all the expenses of purchase. Two of the houses already belong to Government, being old Cook houses attached to the late " House of Correction." They are in a dilapidated condition and worth about 1,000 Rupees.

3. The estimate for erecting the Bullet Factory amounts to Rupees (27,000) twenty seven thousand, which with the Supplemental estimate now submitted augments the total cost of the whole project to Rupees (40,000) forty thousand.

4. In connexion with the above plans, I beg to refer you to the following letters forwarded to your Department on the 29th Ultimo.

From the Inspector General of Ordnance, No. 2711, dated 9th October 1857.

From Lieutenant Faber, Acting Garrison Engineer No. 429, dated 29th October 1857.

Letter from Colonel P. HAMOND, Principal Commissary of Ordnance ; to Lieutenant Colonel G. BALFOUR, Inspector General of Ordnance and Magazines, dated 9th October 1857, No. 2711.

SIR,

As the building in which the Machinery for making up Minie Rifle Bullets is to be placed, is now on a much more extensive scale than was originally contemplated owing to the Friction Tube and Fuse cutting Machinery which are also to be worked by the same Steam Engine, having been subsequently sent from England, whereby a greater extent of building became necessary, in order to work the additional Machinery, as well as for the accommodation of the stores attached thereto, I have the honor to bring to your notice that as so much money is to be spent on this building intended for three important establishments the security and well working of which are of so much consequence to the efficiency of the Army, it appears to me expedient that a few additional Rupees should not be spared to render this Manufactory complete in every respect, I therefore beg to offer the following suggestions which if carried out, will I think effect this desirable object and should they meet with your approval, I trust you will recommend them to the favorable consideration of Government.

2. The building you are aware is erected in one of the Bastions of the Black Town wall, and is therefore protected on three sides, on all of which there are embrasures where small pieces of Ordnance might be advantageously placed and to render the place perfectly secure, I would recommend the small building on the southern side being cleared away and a wall with a flanking defence and a strong gate substituted.

3. The road on the south should also be turned, and the huts and a small house opposite the Bastion cleared away so as to admit of an open space all round the Manufactory.

4. The establishment is to consist of five Europeans, 100 Lascars with Artificers, and I consider it most desirable that they should all be located on the spot, there is ample space extending up to the Invalid Barracks at present occupied by small native huts which could be appropriated for that purpose, and I have experienced so much inconvenience with the Arsenal establishment in having the Europeans all about Black Town, and the Lascars scattered between the Mount and Royapooram not to see the necessity of keeping the men together and this can best be done at the out-set as the ground in front may not always be obtainable, except at a high price.

5. By having the Europeans close at hand in the event of any tumult or insurrection, the building would always be capable of making a good defence and form a connecting chain of post with the Mint and Clive's Battery, affording at the same time protection to the Jail and Railway station.

Fort Saint George, Public Works Consultation of 8th December 1857.

6. As the duties of this Manufactory will be heavy and responsible, it will be necessary that the Principal Commissary of Ordnance or one of his Assistants should be frequently there, an Office will therefore be necessary and I recommend that it should be built on the Rampart where there is ample room and the expense of it included in the estimate.

7. As it will not be safe to have the Friction Tubes filled at the Manufactory I shall be obliged by your informing me where it is to be done, the Artillery Depôt at the Mount and Laboratory Fort St. George, appear to me the most suitable places for this operation, but if the latter be selected it will be necessary to have a detached house for this purpose on the Laboratory Bastion apart from all the other buildings.

Forwarded to Captain Rawlins, for his information.

Inspector General's Office, Fort Saint George, 10th October 1857.

(Signed) G. BALFOUR, Lieutenant Colonel,
Inspector General of Ordnance and Magazines.

Letter from Captain H. W. RAWLINS, Garrison Engineer; to Colonel C. E. FABER, Chief Engineer, dated 12th October 1857, No. 409½.

SIR,

In obedience to the orders contained in your Proceedings No. 1577, 22nd June last, I have the honor to submit revised Plans and Estimates, amounting to Rupees (27,000) twenty-seven thousand, for erecting a range of buildings, as a Factory for making Minie Bullets, Friction Tubes, Plugs, Fuses and other patent apparatus, lately received from England, connected with the Ordnance Department.

2. In Extract Minutes Consultation No. 806, 28th April last, the site of the old " House of Correction" was approved of by Government for the building originally intended for making Minie Bullets only, and the work was begun on emergency at an estimated cost of Rupees (7,500) seven thousand and five hundred. Since then a quantity of other Machinery for Friction Tubes, Fuses &c., has arrived from England, and it has been proposed that the whole shall be placed together in order that it may be driven by one shaft from the Minie Bullet Engine of 25 H. P. This has greatly increased the accommodation required, and of course the amount of the estimate.

3. New shafts to go the whole length of the workshops will be required and must be immediately sent for from England. That now received is only 34 feet, whereas the length of shafting now required is 162 feet. I have furnished Mr. Broughton with a copy of the plan that the same may be sent to England in order that Messrs. Nasmyth may see exactly what is required. The shafting will of course be sent out complete with " Haugers," Pullies, Bevil Wheels &c., of the correct shape and size. Meanwhile the 34 feet of shafting now on hand can be set up and used at once for making the Minie Bullets.

4. The present plan is approved of by the Inspector General of Ordnance, and by the Mechanical Engineer purposely sent from England to work the apparatus. The area of the proposed building contains 5,037 superficial feet, which is considered sufficient for all purposes. In addition to which there are already built 6,700 superficial feet of excellent Bombproofs and godowns, which will be most suitable for store rooms ; and altogether I believe that in no other site could the same accommodation be provided at the estimated cost now submitted.

P. S.—Since writing the above, I have received the accompanying letter from the Principal Commissary of Ordnance No. 2711, dated 9th Instant, and I solicit your orders on the subject before making out the detailed estimates and plans. I enclose a rough sketch of the additions proposed by the above Officer, and I calculate that their cost will amount to Rupees (37,000) thirty-seven thousand, according to the following particulars :

this desirable object and should they meet with your approval & that you will recommend them to the favorable consideration of Government—

2 The building you enquire is called one of the Bastions of the Black Town wall, and is therefore pierced with three rows of embrasures whose small pieces of ordnance might be advantageously placed and it under the place hereafter I may should command the small building on the Northern side being cleared away and as well with as flanking defence and a strong Gate substituted

3 The road on the South should also be barred, and the huts and a small house opposite the Bastion cleared away so as to admit of an open space all round the Manufactory

4 The Establishment to consist of one Conductor, two Lascars with Artificers and Requisites at most desirable that they should all be located on the spot there is ample space excepting up to the Invalid Barracks at present occupied by small native huts which could be appropriated for that purpose and I have enquired

to

be much inconvenience with the Arsenal Establishment in having the Europeans all about Black Town, and the Lascars scattered between the Mount and Nagapatnam not to see the necessity of keeping the men together and this can best be done at the outset as the ground in front may not always be obtainable, except at a high price

5 By having the Europeans close at hand in the event of any tumult or insurrection, the Guard army would always be capable of mustering a good defence and form a connecting chain of Posts with the Mint and Civil Battery affording at the same time protection to the port and Railway Station

6. As the duties of this Manufactory will be heavy and responsible it will be necessary that the Principal Commissary of Ordnance or one of his Assistants should be frequently there an Office will therefore be necessary and I recommend that it should be built on the Ramport where there is ample room and the expense of it included in the Estimate

7 As it will not be safe to have the Powder

Fraction Tubes filled at the Manufactory
shall be delayed by your informing me where
it is to be done the Artillery Depot at the
Mount and the Laboratory Fort St George
appear to me the most suitable places for
this operation, but if the latter be selected
it will be necessary to have a detached
house for this purpose on the Laboratory
Basting apart from all the other Buildings

Arsenal
Fort St George
9th Octr 1857

Have &c
Dig'y P. Maitland. C.S.
Principal Comptr of Ords

(True Copy)
F. Nathan
Lt Col
Inspector Genl of Ords & Mags

Forwarded to Captain Rambaut
for his information

Inspector Genl's Office
Fort St George
10th October 1857

F. Nathan
Lt Col
Inspector Genl of Ords
& Mags

Comptr Mar Ct

Garrison Engineers Office.

No. 400½

From

Captain H. D. Rawlins
Garrison Engineer

To

The Chief Engineer in the
S. D. D.
Fort St. George

Military Dir

In obedience to the orders contained in your Proceedings No. 1577. 22nd June last, I have the honor to submit revised plans & estimates, amounting to Rupees (27,000) Twenty seven thousand for erecting a range of Buildings as a Factory for making Minnie Bullets, Friction tubes, Plugs, Fuses and other patent apparatus, lately received from England; connected with the Ordnance Department.

2. The Govt. No. Cons: No. 806, 28th April last the site of the old "House of Correction" was approved of by Government for the building originally intended for making Minnie Bullets only, and the work was begun on emergency at an estimated cost of Rupees (7500) Seven thousand & five hundred. Since then a quantity of other machinery for Friction tubes, Fuses &c has arrived from England, and it has been proposed

that

Brought Over	18500
Strong Double gate	900
Inside wall to gorge of bastion & inside gate	2000
Office required for the Supt. Officer	1500
Value of 38 grounds of Land to be purchased at 200 Rupees per ground	7600
Value of Houses thereon	4400
Turning Road and Remaking	1000
Sundries	1100
Total Rupees.	37000

H. W. Rawlins Capt.

Garrison Engineers Office
No 103

From Captain W. R. Rawlins
Garrison Engineer

To The Chief Engineer in the
D. P. W.
Fort St. George

Sir

In obedience to the orders communi-
-cated in an Official Memorandum from the
Superintending Engineer of the Central Circle dated
the 31st Ultimo, I have the honor to submit a
Supplementary Plan and estimate amounting to
Rupees (13000) Thirteen thousand for erecting
[illegible] to be attached to the South front of the
Fort Ramparts.

2. The Plan has been approved of by the
Inspector General of Ordnance and Superin-
-tending Engineer and amounts to 3959 square yards
exclusive of the present requisition for turning the round
towards the Buildings - Square allowed Rs. 11000

For the execution of the above requisition to be demo-
-lished; and I believe this sum will be ample
to cover all the expenses of purchase. One of the
Rooms already belong to Government, being old
Cork Rooms formerly attached to the late Mount
of Correction - They are in a dilapidated condition

Enc

Fo Barl. Sec. Ins. Fo 23

1855-57 - 1857

Central Circle
Engineer Depart.

From

The Garrison Engr.

To

The Chief Engr.
D. P. W.

Dated 12th October 1857
Rec'd.

Ch. J. No. 1402
1431 3/57

Submitting Revised
Plans and Estimate with
Abstract Amounting to Rs.
27000 for erecting a range
of Buildings as a Factory
for Drawing Minie & Bullets
Friction tubes, Plugs, Fuses
and other patent apparatus
as also forwards letter from
the Principal Commissary of
Ordnance [illegible]

and worth about 1000 Rupees.

3. The estimate for erecting the Bullet factory amounts to Rupees (27,000) Twenty seven thousand which with the supplemental estimate now submitted augments the total cost of the whole project to Rs 40,000 Forty thousand.

4. In connexion with the above plans, I beg to refer you to the following letters forwarded to your Department on the 29th Ultimo—

From the Inspector General of Ordnance
No. 2711 dated 9th October 1857.

From Lieut. Haberling Garrison Engineer
No. 429 dated 29th October 1857.

I have the honor to be
Sir
Your most Obt. Servant
Wm. Rawlins. Captain
Garrison Engineer

Fort St. George
10th November
1857

Central Office of Public Works,
Fort Saint George,
19 November 1857.

'Military'

No. 5347

From,

The Chief Engineer

To,

The Secretary to Government P. W. D.

Sir,

With reference to Extract from the Minutes of Consultation No. 886, dated 28th April 1857, I have the honor to forward for submission to Government and entry in the Budget of 1858/59, plans and Estimates for constructing a range of buildings as a Factory for making Minie Bullets &c., on the site of the old House of Correction, in one of the Bastions of the Black Town fortifications.

2. The first of these estimates amounts to Rupees (27,000) Twenty Seven thousand, providing for the buildings themselves, at a very much greater expense than was contemplated at first, which increase is owing, as explained by Captain Rawlins, to the additional Machinery for

friction

Original

Enclosures 8.

1 Letter from the Garrison Engineer No. 1409/1 d/12th October 1857.

1 Copy of letter from Principal Commissary of Ordnance to Inspr. General of Ordnance d/9th Oct./57 No. 2711.

1 Letter from the Garrison Engineer No. 463 d/10th November 1857.

2 Abstract Estimates.

3 Plans.

8.

To Fort St. George Nov. 19/57.

Engineer's Office,
Fort St. George,
Dated 19th November 1857.

Sir,

I have the honor to forward herewith a Plan and Estimate for a Range of Buildings to be erected on the site of the old House of Correction, for the purpose of manufacturing Minie Bullets.

2. The Estimate amounts to Rupees (27,000) Twenty Seven thousand.

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

W.

Enclosures 3

Public

Secretary

friction tubes, fuses &c., since required to be put up; in order to be worked by one Engine and Shaft; The whole of the Shafting that will be ultimately required has not been received from England, but what is ready 3½ feet in length will be set up and used at once.

3 The plans and estimates have been carefully prepared in communication with Mr. Broughton the Mechanical Engineer, and appear to be in all respects satisfactory and highly creditable to Captain Rawlins, whose diligence and solicitude have been very conspicuous and I think successful.

4 The second Estimate Rupees (13,000) Thirteen thousand, prepared in conformity to the wishes of the Inspector General of Ordnance, provides for the construction of a Loopholed wall with banquette, in front of the entrance to the Minie Bullet Factory, and the clearance of a considerable space inside, by the removal of certain buildings.

5 Of the expediency not to say necessity, of this defensive work, for the protection of this very important Manufactory, I need express no doubt; and I may only add my approval of its constructive details, and rates of

of the estimates.

6 Thus the aggregate expense of the works of the Minie Bullet Factory will be Rupees (40,000) Forty thousand and those of the buildings themselves are now in progress.

7 I should however remark that to those estimates, will probably be hereafter added others, for quarters for Ordnance Staff attached to the Factory, for whom no provision is now made, but whose residence in the vicinity is considered by the Principal Commissary of Ordnance highly advisable if not indeed indispensable.

8 The rates are moderate and sufficient, and I recommend the Estimates for the favorable consideration of Government.

I have the honor to be,
Sir,
Your most Obt. Servt.
A. Fraser Colonel
Chief Engineer

Central Office of P. W.
Fort Saint George,
19 November 1857.

To,
The Secretary to Government P. W. D.

Encls

Comm: 28th Apl/57 Nos 121-122

Public Works Department
Dis Comm & Engineer
No 2363.

From The Chief Engineer

To The Secretary to Government
N.W.P.

Dated 19
Received 28th } November/57

No 5347.

Enclosures 8
& My Despatch No: Dec.57 No 2440-42

Submitted for entry in the Budget of 1858/59 2 Estimates amounting together to Rupees (40,000) Forty thousand, for constructing a Range of buildings as a Factory for making Minie Bullets &c

Vide 67 & 68

With an Order
No 2271 7th December

No. 2271.

Ordered to be referred to the Military Department

Fred. St. George
7th Dec. 1857

1 Copies to the Orig. Disp. with 3 Orig. Encls